



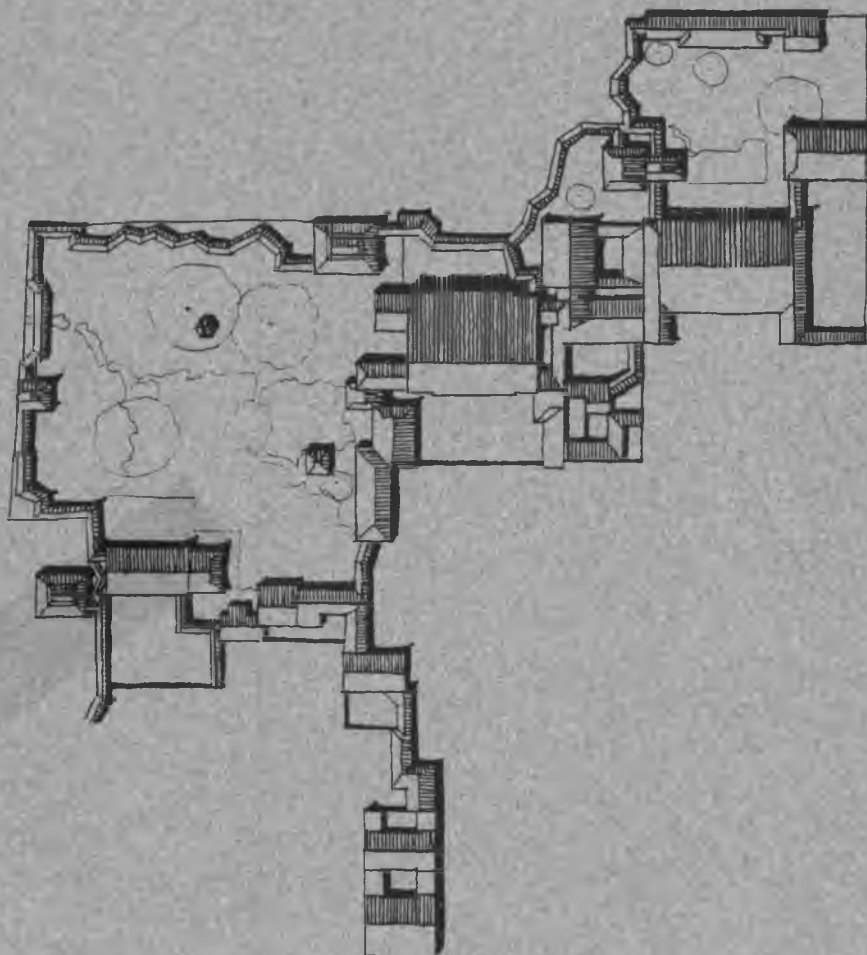
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# SUZHOU PRIVATE GARDEN

**A COMBINATION OF ARTISTIC  
IDEAS, NATURAL SCENERY AND  
RESIDENTIAL ENVIRONMENT  
IN CHINA**





### GARDEN

□ SYMBOLIZES A WALLED ENCLOSURE.  
± IS SIMILAR TO A PLAN OF BUILDINGS.  
THE MIDDLE □ REPRESENTS A POOL,  
AND 丿 LOOKS LIKE A ROCK OR A TREE  
FROM THE FRONT.

**SUZHOU PRIVATE GARDEN**

\_\_\_\_\_ **A COMBINATION OF ARTISTIC IDEAS, NATURAL SCENERY  
AND RESIDENTIAL ENVIRONMENT IN CHINA**

**BY**

**BO SUN**

\_\_\_\_\_  
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For the Degree of**

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**IN the Graduate College**

**THE UNIVERSITY OF ARIZONA**

**1 9 9 5**

## STATEMENT BY AUTHOR

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## ABSTRACT

Chinese architectural design and urban development are entering a crucial period. The connection of traditional ideas with contemporary society, and the improvement of urban living environment, are two of the significant issues in China today.

The Suzhou private garden is an important aspect of Chinese architecture and gardens. Its design procedure included the proper selection and layout of sites, the comprehensive employment of traditional philosophical and artistic ideas, and attractive styles of buildings, and comfortable living environments were created in urban centers.

When considering the Chinese urban environment of the present, it is important and necessary to conduct a thorough survey and evaluation of the Suzhou gardens. This would include an investigation of their functional and aesthetic values. The resulting information will be invaluable when combining the design principles and ideologies of Suzhou gardens with contemporary urban designs. The application of these principles, however, has limitations in a contemporary conditions.

# 自然

NATURE



## CHAPTER ONE:

### INTRODUCTION

#### 1. 1. GARDEN: A POTENTIAL FOR IMPROVING THE URBAN ENVIRONMENT

Man, as an integral part of nature, has developed, through time, a unique and close relationship with the natural forces which have surrounded him. Persistent exploration and astute observation have facilitated man's awareness of his environment. He soon learned that this environment was not only a great source of hope and beauty, but that it also created disaster and catastrophe. Because early man lacked specific scientific knowledge about his environment, he regarded nature with both adoration and fear. His innate appreciation, and love of beauty was expressed by imitating natural forms and colors in early, simple design. These initial, creative attempts to recreate the beauty in nature provided the genesis of modern, more complex landscaped areas.

With the advent of the industrial revolution, cities became the dominant environment for man's living, socializing, and producing activities. Since the later part of the nineteenth century, with its rapid development of industrialization and urbanization, many large cities have had serious environmental problems. Urban population has increased rapidly, and urban planning has not always been able to facilitate this growth, which has caused a deterioration in the quality of people's living environments. Many old and once beautiful cities are losing those features that originally made them attractive and desirable places in which to dwell. This is the result of rapid



expansion and industrialization which has caused irreparable damage to natural forms and resources.<sup>[1]</sup>

During the middle of the twentieth century, the urban ecological environment was studied with an intent to use artificial landscaping as a means by which to improve ecology and to create beautification.<sup>[2]</sup> Ideally, a natural environment must be in congruity with the human environment in order to produce optimum environmental harmony. Therefore, urban gardening could be an effective method by which to create natural beauty. Different varieties of landscaping can evoke assorted emotions. National parks, public urban parks, scientific gardens and private gardens each have specific spatial scales that create unique feelings between man and nature. Probably, an individual's private garden is the one to which human beings are the closest.

A garden is a small place where technological and artistic devices are used to alter topography. Trees, flowers and plants are introduced, small buildings may be constructed, and pathways provide walking spaces. This alteration is meant to create a pleasing environment.<sup>[3]</sup> Chinese gardens meld the beauties of nature and artificiality, and connect the artistic concepts with real lives. A Chinese garden creates a physical space in which the social lives, the natural surroundings and the human being's emotions can be reflected. Therefore, a Chinese garden contains various aspects of natural foliage,

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[1] A Comprehensive Comment. Collection of Modern Chinese Garden Designs. By Zhu, You-jie and Huai-ji Zan. Beijing, China: China Building Industry Press, 1994. 1.

[2] A Comprehensive Comment. Collection of Modern Chinese Garden Designs. By Zhu, You-jie and Huai-ji Zan. Beijing, China: China Building Industry Press, 1994. 1.

[3] Wang, Giu-zhou. "Parks and Gardens". China Encyclopaedia-Architecture and Planning. 1st ed. Beijing, China: China Encyclopaedia Press, 1988. 515.

mountains, water and buildings.<sup>[4]</sup> Over the centuries, the Chinese have created gardens which have combined amusement, natural landscape and religious symbolism. The essential types are the imperial gardens, the private gardens, the temple gardens and the natural landscapes.<sup>[5]</sup> A Chinese private garden, which is much different from other types of gardens, not only meets residential requirements, but also provides an enjoyable physical environment. The most famous of these private gardens are located in Suzhou City.

Suzhou City, located at the southern end of the Yangtze River, (Fig.1) contains many important and excellent examples of Chinese private gardens which are usually built in urban centers, and connected to residential buildings. In crowded areas, a private garden can provide the dual function of combining a residence with a comfortable, micro-natural environment. When studying Suzhou gardens, it is important to consider both aesthetics and ecology. Also, creating a beautiful, orderly, and ever-changing courtyard space was the major concern and goal of its designer. That is one of the reasons why this type of garden has become so prominent in Chinese architectural history,<sup>[6]</sup> and why Suzhou private gardens will be the focus of this paper.

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[4] Feng, Zhong-ping, Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 29.

[5] Feng, Zhong-ping, Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 32.

[6] Liu, Dun-zhen, History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd. ed. Beijing, China: China Building Industry Press, 1984. 337-347.



**Fig. 1** Administrative Divisions of China, from *Atlas of The People's Republic of China*, page: 2. Beijing, China: Foreign Languages Press and China Cartographic Publishing House, 1989.

## 1. 2. PURPOSE OF THIS STUDY

The goal of this paper is to study the historic and cultural background of the classical Suzhou private garden. By understanding its practical aspects, some valuable knowledge will be presented and, further, may be applied to the improvement of the current Chinese urban residential environment.

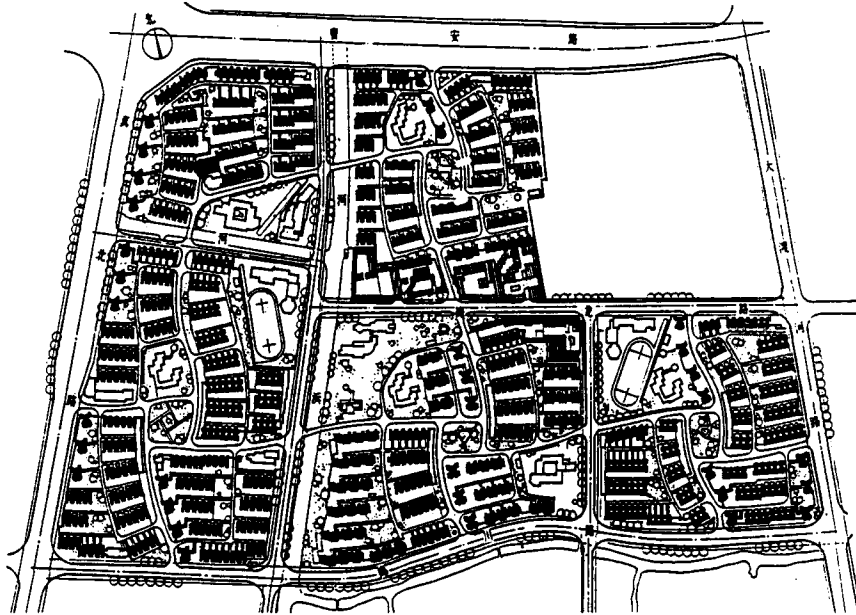
Urban planning and its resultant research are at a critical period of time in China. Developing limits of expansion for existing urban areas, and improving older, more established cities will be an important and challenging occupation for city planners and architects in the future. It will be necessary to preserve historical urban centers and maintain their distinctive, cultural features and continuity.<sup>[7]</sup> Studying and understanding the features of a Suzhou private garden will be the means by which these historic cities can be maintained and improved.

### 1. 2. 1. The Suzhou private garden and the urban environment

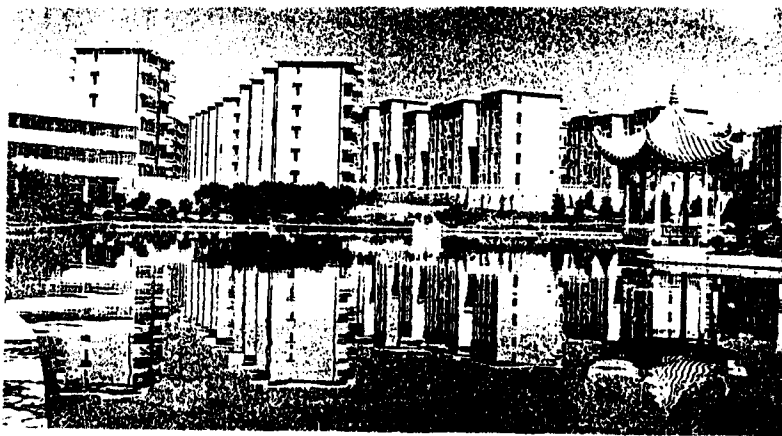
Social and economic reform in China has caused urban functions to become much more complicated. Currently, urban construction, and particularly the construction of urban residential buildings, has had large-scale development. (Fig. 2) So, it would seem prudent to explore the virtues and values of the classical Suzhou private garden. This type of garden has distinctive architectural features which render it desirable. Natural landscaping can be introduced into, and harmonized with, a densely built and populated urban area and still consume minimal space. Urban density creates restriction, but natural landscaping could provide enjoyment and a

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[7] Zhang, Zu-gang. "Developing the Cities, Architecture and Environment". Architectural Journal 10 (1992): 34.



A site plan of a Chinese residential quarter,  
from Architectural Journal 4 (1991): 9.



**Fig. 2** A Chinese residential quarter,  
from Architectural Journal 11 (1990): 17.

comfortable living environment. Modernizing the Chinese urban environment and architectural style does not indicate negating tradition. Undoubtedly, the value of the Chinese cultural inheritance has an important impact on urban environmental design and construction.

### 1. 2. 2. The Chinese private garden and traditional culture

At the present time, theory and philosophy of Western architecture have permeated the field of Chinese architecture. Chinese architects have been confronted with new and vastly different styles and forms of designs. These new ideas have caused inspiration and excitement for Chinese architects.

(Fig. 3) However, it is incumbent upon these architects to maintain classical influences and ideologies while incorporating more modern styles. Developing a unique, Chinese modern architectural style should be a major goal of Chinese architects.

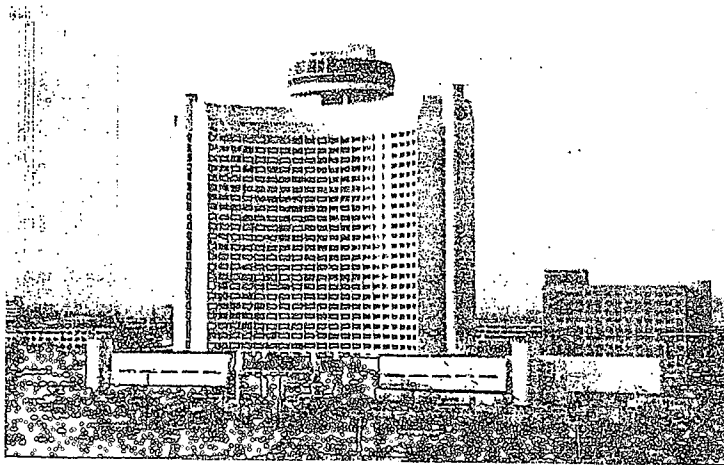


Fig. 3 The International Hotel, Beijing,  
from Chinese Architects, page: 41.

Every nation has a unique culture, and within this culture a distinct art form may be developed. In order to understand a particular type of cultural style or system, historical and cultural backgrounds must be studied first.

The design of a classic Suzhou private garden embodies traditional Chinese philosophical and aesthetic ideologies. Its spatial composition, scenic views, architectural styles and ornamental patterns have all been designed under the influence and direction of these traditions. Also, the designs of the Suzhou gardens were permeated with ideals, attitudes, skills and artistic principles of scholars, poets and painters. A Chinese garden is often referred to as "solid painting and poetry".<sup>[8]</sup> When studying the Suzhou private garden, early Chinese architectural and environmental designs can be observed in their forms, as well as in their inner character and spirit.

### 1. 3. SCOPE OF THIS PRESENTATION

This research paper will be organized into three parts.

A historical description of a classic Chinese garden. Historically, gardens and agriculture emerged concurrently. These gardens were developed because of the necessity to produce food, and were not meant for enjoyment. With the advent of a feudal society, Chinese royal gardens were created for pleasure. They were constructed to imitate natural landscapes and scenery and some of the buildings were open in order to more easily view this natural beauty. This style of garden reached its peak during the Qing Dynasty (A. D. 1644 - 1911), outstanding examples of which are The Summer

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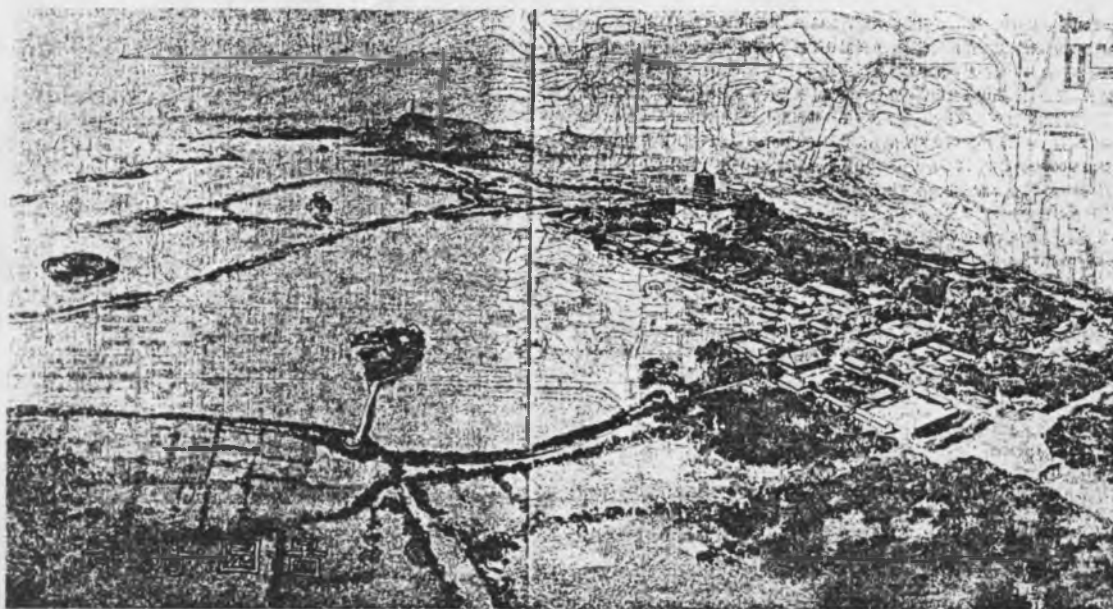
[8] Li, Yong-he. Cathay's Idea-Design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1984. 309.

Palace (Fig. 4) in Beijing and The Imperial Summer Resort in Chengde, Hebei Province (Fig. 5). During this period, many private gardens were constructed. Through the progression of time, the functional garden has gradually been replaced by an artistic one, and the theory and practice of a private garden developed. The evolution of the private garden has always been related to social transformation, cultural change, climatic conditions and technological progress.

**An analysis of the scenic plan in the Suzhou private garden.** A Suzhou private garden has a distinctive design. Its elemental selections and scenic settings are unique. Although local climatic and topographic conditions have provided the ideal conditions for building a garden, primary principles of design were employed to create the excellence of a Suzhou private garden. There is a formalized method for composing these gardens which includes rules for the correct placement of water, rocks, foliage and structures. These principles, different from those of other garden designs, are basic to the understanding of the Suzhou gardens.

**A perspective of spatial design of the Suzhou private garden.** The most distinctive features of a Suzhou garden are reflected in its spatial organization. In order to create changing and pleasant spatial visual feeling, several special design skills were applied, which include the organization of courtyards, buildings and pathways. Analyzing the design skills that were used to create these gardens helps to clarify the means by which a residential garden was constructed within an urban environment, thus producing an ideal harmony between artificial environment, natural landscapes and artistic styles.





**Fig. 4** A bird's-eye view of Summer Palace, Beijing,  
from History of Chinese Classical Architecture.



**Fig. 5** The Summer Resort, Chende, Hebei,  
from Chinese Architecture, cover photograph.

In addition, an exploration of the influence of Chinese culture on the garden design is also discussed in this paper. There are several Chinese cultural ideologies that reflect great wisdom. Two of the most prominent religious doctrines are Confucianism and Taoism, both of which have had major influence on the formation and development of Chinese gardens. Their special philosophical and aesthetic concepts have provided the basic source of design and execution of a classical Suzhou garden. A general study of Chinese culture and philosophy will facilitate an understanding of Suzhou private gardens, a classic art form.

The formation of a classic Suzhou private garden is a unique expression of art. One prominent characteristic of this art form is an intense and mutual expression of emotion between human beings and nature within an urban environment. Any direct or indirect natural element may serve as an object of artistic expression. Also, abstract artistic concepts may be created by using concrete forms and designs. At the present time, analyses and conclusions about the more salient points of a classical Suzhou private garden might help Chinese architects to understand, more clearly, the practicality, aesthetics, and ideologies of this type of garden, as they apply its best qualities to a modern cultural and social atmosphere. When artistic concepts, design skills and practical surroundings can be incorporated satisfactorily, then an ideal living environment will be created.

# 屬史

HISTORY

# 傳統

TRADITION



## CHAPTER TWO:

### HISTORICAL DEVELOPMENT AND MAJOR CHARACTERISTICS OF CHINESE GARDENS

In order to understand, reproduce and continue an important event, it is necessary to investigate its historic development to insure the accuracy of its succession.<sup>[9]</sup> This knowledge can be essential for gaining insight into, and appreciation of, a specific cultural heritage. An historic review may provide a more complete understanding of the social, cultural and environmental impact that has influenced Chinese gardens throughout history.

The Suzhou private garden is a distinct type of Chinese gardens which has a close relationship to human living. As a result, this unique aspect of traditional Chinese culture has been influenced by, and has influenced, other types of gardens.

#### 2.1. THE PREHISTORY, QIN (221 - 206 B. C.), WESTERN HAN (206 B. C. - A. D. 8) AND EASTERN HAN (A. D. 25 - 220) DYNASTIES (Fig. 6)

The history of Chinese gardens is an evolution beginning 2200 years ago. The emergence of ancient Chinese gardens can be dated from the

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[9] Lon, Qin-zhong. "Foreward". Cathay's Idea-Design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1984. 1.

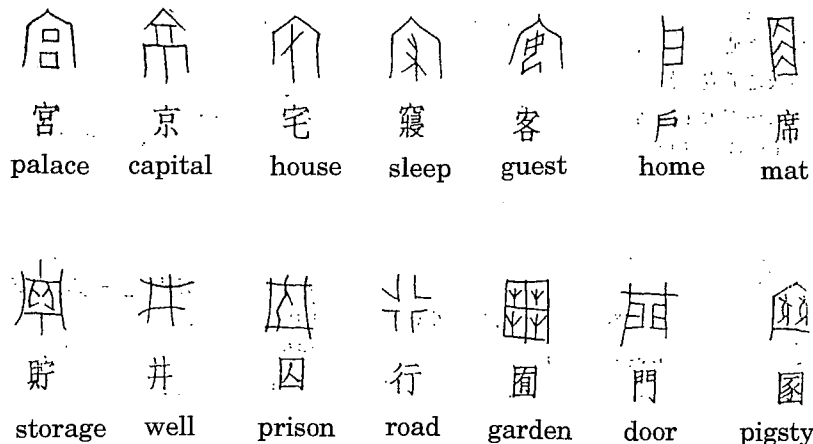
# THE DYNASTIES OF CHINA

DYNASTIES	DATES ESTABLISHED
SHANG	1450 - 1028 B. C.
ZHOU	1027 - 256 B. C.
QIN	221 - 206 B. C.
WESTERN HAN	206 - 8 B. C.
EASTERN HAN	A. D. 25 - 220
WEI	A. D. 220 - 265
WESTERN JIN	A. D. 265 - 316
EASTERN JIN	A. D. 317 - 420
SOUTHERN AND NORTHERN DYNASTIES	A. D. 420 - 589
SUI	A. D. 581 - 618
TANG	A. D. 618 - 907
NORTHERN SONG	A. D. 960 - 1127
SOUTHERN SONG	A. D. 1127 - 1279
YUAN	A. D. 1271 - 1368
MING	A. D. 1368 - 1644
QING	A. D. 1636 - 1911

Shang (1600 - 1028 B. C.) and Zhou (1027 - 256 B. C.) Dynasties.<sup>[10]</sup>

The Shang Dynasty was the first, historically, to establish state authority in China. Large imperial palaces and gardens were built for residences and for pleasure. Historical records indicate that many ancient Chinese characters were developed to express special meanings at this time.

Examples are 宮 (palace), 宅 (house), and 園 (garden).<sup>[11]</sup> (Fig. 7) These



**Fig. 7** A comparison of ancient and modern Chinese characters, after History of Chinese Classical Architecture, page: 30.

characters demonstrates the basic concepts of natural form and function as understood by these ancient people. One character, 園, indicates the selection of a natural site which included pools, hills and trees. This showed that it would be used as a hunting park for kings. It was the oldest and plainest form of a Chinese garden. The simple requirements for a garden were practically contained by the word 園 where 園 symbolizes a walled

[10] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 5. Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng, 1st ed. Beijing, China: Qinghua University Press, 1988. 6.

[11] Li, Yong-he. Cathay's Idea-Design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1984. 47 - 51. Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 6.

enclosure. 土 is similar to the plan of a building, but could also represent a pavilion, the middle 口 representing a pool, and 木 looking like a rock or a tree from the front.<sup>[12]</sup> The first garden recorded in Chinese history was that of King Wen Wang of the Zhou Dynasty (1027 - 256 B. C.). This garden was established in the eleventh century B. C. at what is now Xi'an City in the Shanxi Province. Built within this garden were the Ling (Divine) Terrace, The Ling (Divine) Garden and Ling (Divine) Lake, all of which covered 6.8 sq. miles of natural forests. The king relaxed and hunted in the scenic park, and from the terrace, he could admire the surrounding scenery. Fish were raised in an enclosed lake, and astronomers used the terraces to observe the sky. This early imperial garden of the Zhou Dynasty was of simple design, and its practical uses were as beneficial as its pleasures.<sup>[13]</sup>

The unification of China under the Qin Dynasty (221 B. C.) opened a new era of political, economic and cultural development in Chinese history. At that time, the first emperor of the Qin Dynasty, King Qin Shi Huang, set up his capital at what is now Xianyang City, in Shanxi Province. His rule of all of China was powerful. Building materials and labor resources were plentiful, so he was able to construct a large palace and garden in the central area of the Shanxi Plain. The most outstanding garden of this period constructed in 212 B. C. was Shanglin Yuan (Upper Forest Garden). The lovely A'fang Palace was the center of this garden.<sup>[14]</sup> Although the A'fang Palace had been

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[12] Liu, Laurence, G. Chinese Architecture. New York: Rizzoli International Publications, Inc, 1989. 197.

[13] Li, Yong-he. Cathay's Idea-Design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1984. 310. Hu, Dong-chu. The Way of the Vurtuous -The influence of art and philosophy on Chinese garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 7.

[14] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 48.

destroyed by war, the Chinese ancient poet, Du Mu (A. D. 803 - 853), described it as follows:

The Palace on Li shan (Mountain) turned from North to West along a (150 km) way with pavilions and palaces hidden in the deep shade of trees. Pavilions and lofts were cunningly placed in accord with the rise and fall of the land and connected one to the other with artistic arcades. Creeks and streams flowed under long bridges or were crossed by high rainbow bridges. The palace was made even more beautiful when water was drawn from the Wei and Fan Rivers to extend and enlarge the lakes, ponds and water courses in the gardens. [15]

During the Western Han Dynasty (206 B. C. - A. D. 8), its first emperor, Han Gao Zu (202 - 195 B. C.), built two notable palaces. They were Changle Palace (Happy Forever) in the southern part of Chang'an which is now Xi'an City, and later, Weiyang Palace in Xi'an. Later, the emperor, Wu Di (140 - 87 B. C.), enlarged the gardens at Weiyang Palace. (Fig. 8) In addition, another garden palace, called Jianzhang Palace, was built in the western suburbs of Chang'an, now Xi'an City. Rivers, hills, plants and broad ponds were placed in this garden, as well as three islets within ponds which were imagined to be the sea paradise by these ancient Chinese people. [16] This became the basic style of later Chinese imperial gardens. [17] The emperor Wu Di also renovated and enlarged the Shanglin Yuan (Upper Forest Garden) of Qin Dynasty. [18]

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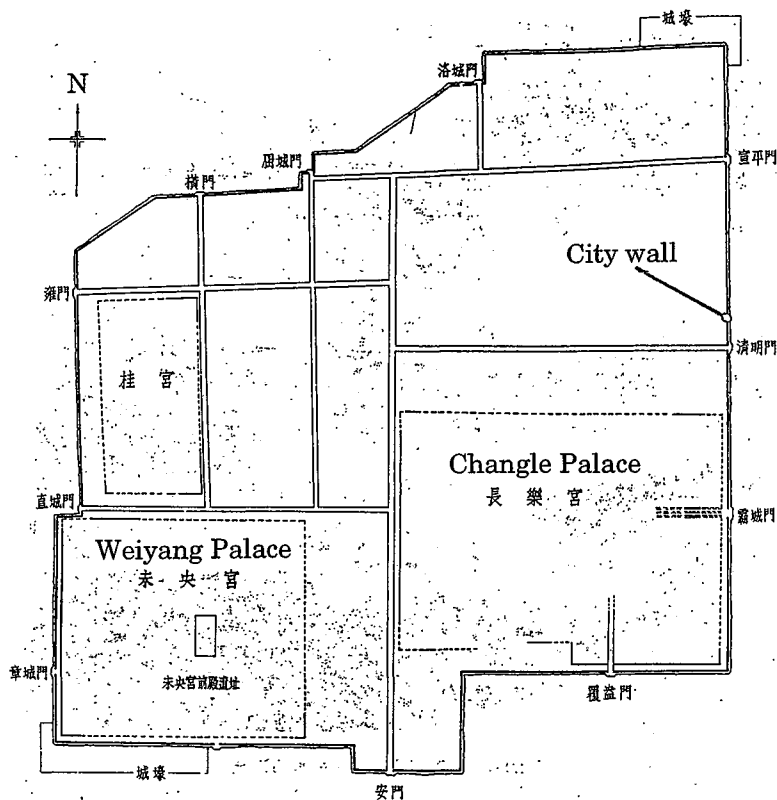
[15] Chen, Li-fang and Siang-lin Yu. The Garden of China. Portland, Oregon: Timber Press, 1986. 6.

[16] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 48 - 49.

[17] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 6.

[18] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 6.





**Fig. 8** A survey drawing of Chang'an City in Han dynasty, from History of Chinese Classical Architecture, page: 43.

In the late Han Dynasty, private gardens owned by officials, landlords and rich merchants emerged and began to be developed. [19] The earliest record of such a garden was that of a wealthy merchant, Yuan Guang-han. It was a 7.4 acre garden in north Luoyang City in Henan Province, containing ponds and rocks connected by meandering, covered walkways with a large number pavilions.[20] With the passing of time, this garden has disappeared.

[19] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 6.

[20] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 52. Tong, Jueng. A Record of South China Garden. 2nd ed. Beijing, China: China Building Industry Press, 1984. 22.

Interesting evidence of the former presence of the Han urban garden has come from an existing Chinese landscape painting. It depicts a pair of hollow, tile door panels belonging to a Han tomb of 60 B. C.. In this painting, "the owners, the master and his wife, are seen looking south from the main hall over a courtyard lined with trees. These are shown symbolically but clearly follow the lines of the courtyards can be seen ostrich-like birds. Two types of gateway mark the entrances, one with tall free-standing stone towers, the other roofed and gated in the Han style. The whole scene therefore depicts a well-ordered and spacious urban garden as it might well have existed in the city of Zhengzhou (Henan Province) some sixty years before the birth of Christ." [21] (Fig. 9)

Another drawing, discovered on some bricks of the Han Dynasty of the first century, shows a typical layout of a private residence and garden at this time. (Fig. 10)

Private gardens at this time began to develop their own style. Scenery was connected to artificial buildings and garden buildings were arranged within the local surroundings. [22]

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[21] Johnston, R. Stewart. Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 12 -13.

[22] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qingjia University Press, 1988. 6.

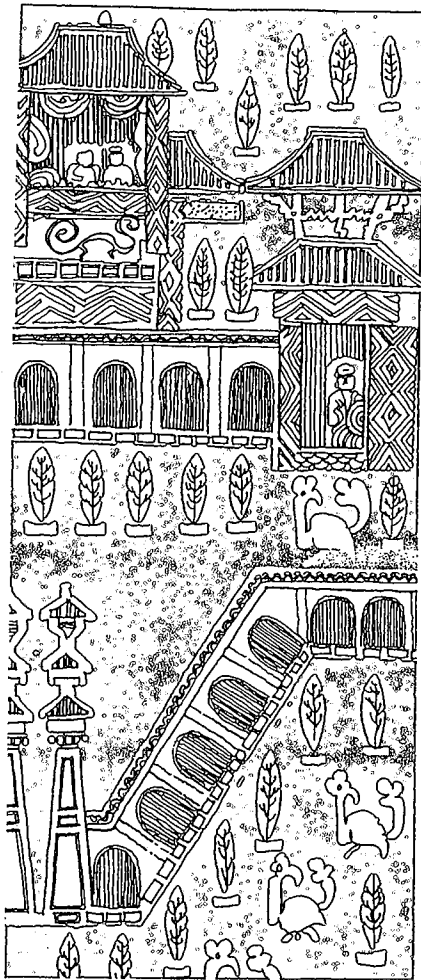


Fig. 9 A door drawing tile of Han dynasty, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 12.

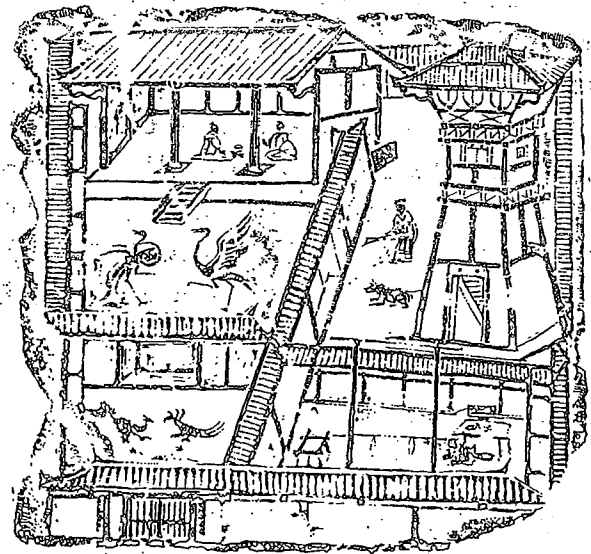


Fig. 10 A drawing tile of Han dynasty, from History of Chinese Classical Architecture, page: 51.

## 2. 2. THE WEI (A. D. 220 - 317), WESTERN AND EASTERN JIN (A. D. 265 - 420) AND SOUTHERN AND NORTHERN (A. D. 317 - 581) DYNASTIES

The third to the sixth century in Chinese history was a period of continuous warfare, turmoil and disorder. However it was also a time for free and intelligent creativity in ideological fields of thought.<sup>[23]</sup> During this 361 year period (A. D. 220 - 581), many scholars were resentful of the turbulent society, and so, they pursued and enjoyed natural beauty in order to escape

[23] A Brief Chinese History. Ed. Zhong-jueng Gao. 2nd ed. Beijing, China: People's Education Press, 1980. 130 - 163.

the disappointment of the time in which they lived. As a result, Chinese landscape poetry and painting emerged, both of which had a profound influence on Chinese garden design. Garden art became altered when literary art more intensely explored natural beauty..<sup>[24]</sup>

During this period, the natural landscaping design of China was developed. Many officials and persons of wealth had gardens built behind their residences, within which earth hills, terraces, and buildings were placed..<sup>[25]</sup>

In the Wei Dynasty, a private garden, Fanglin Yuan (Fragrant Forest Garden), was built in the northern suburbs of Yecheng (now Luoyang City, Henan Province). This garden followed the major design principles developed by Han Dynasty landscaping designers. Later, the Western Jin Dynasty (A. D. 265 - 317) emperor reconstructed Fanglin Yuan (Fragrant Forest Garden) and changed its name to Hualin Yuan (Lush Growth of Trees Garden). Within it, beautiful hills and ponds, imitating natural scenery, were built..<sup>[26]</sup> (Fig. 11)

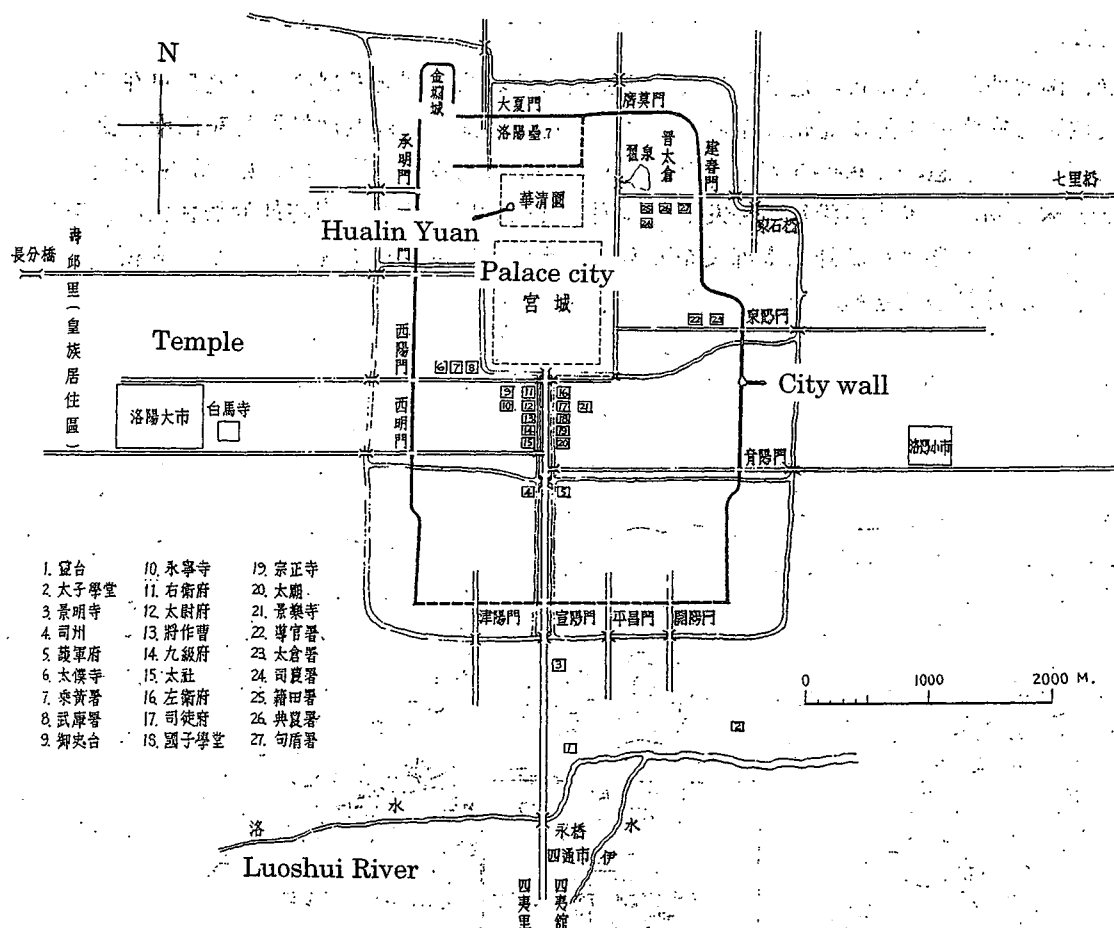
Another recorded private garden was Jingu Yuan (Golden Valley) owned by Shi Chong, a person of wealthy. It was surrounded completely by natural landscaping which including springs, ponds and foliage. At that time, natural scenery had become a major element of gardening. Not only were gardening

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[24] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 6 - 7.

[25] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 87.

[26] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 9. History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 87.



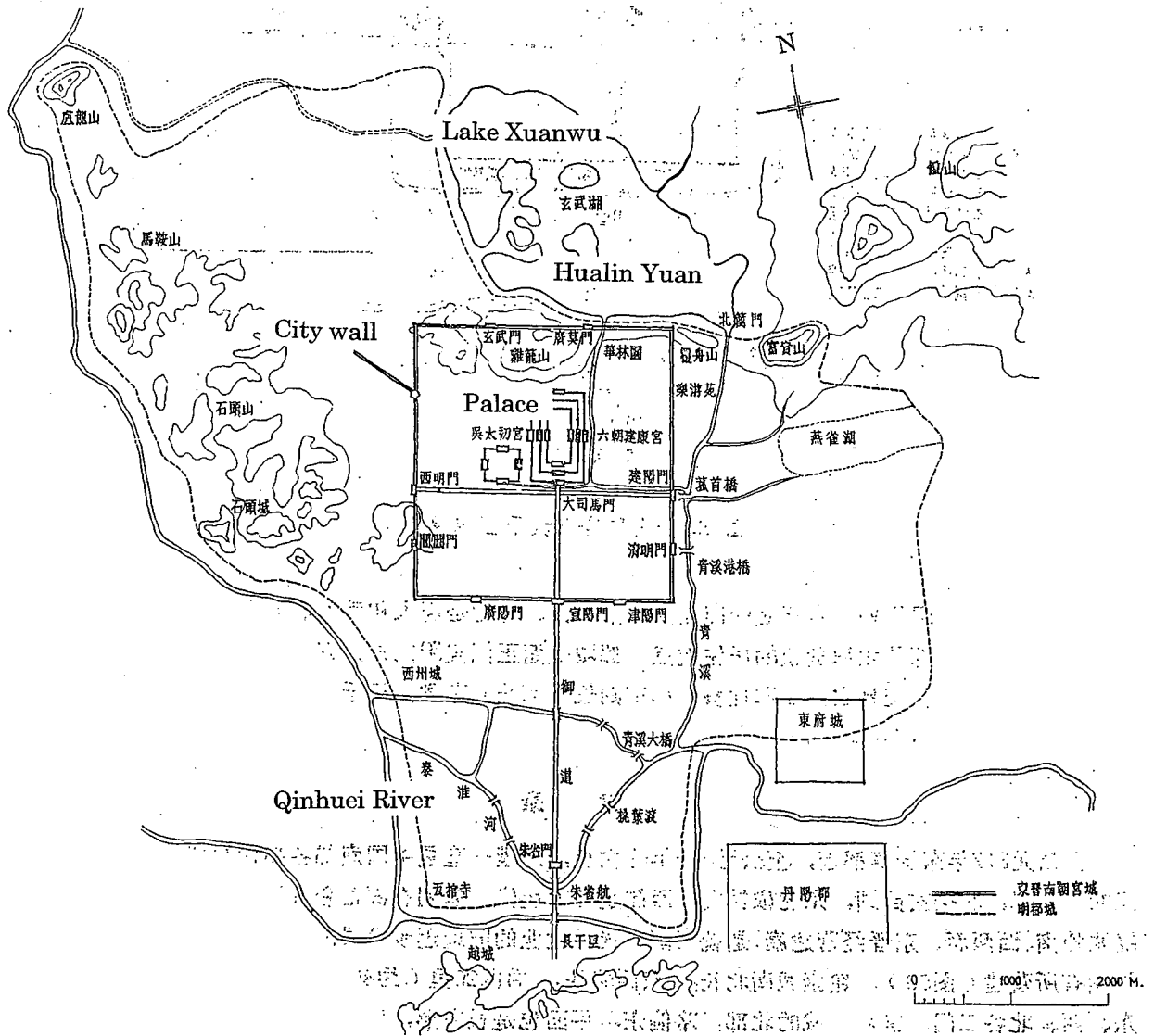
**Fig. 11** A sketch map of palaces and gardens in Luoyang City of Northern Wei dynasty, from Chinese Garden Architecture, page: 7.

techniques developed to a high level, but the construction of private gardens had began a new phase of refinement of natural beauty. [27]

At the beginning of the fourth century, the capital of the Western Jin Dynasty moved from Luoyang to Jankang (now Nanjing City, Jiangsu Province) on the lower southern reaches of the Yangtze River. In this new

[27] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 7. Tong, Jueng. A Record of South China Garden. 2nd ed. Beijing, China: China Building Industry Press, 1984. 22.

capital, the imperial families adopted the original name of Hualin Yuan (Lush Growth of Trees Garden) used in Luoyang for their new palaces and gardens. It was smaller, but more exquisite, than the former garden.<sup>[28]</sup> (Fig. 12) Since the topography and climate of south China create highly



**Fig. 12** An imaginary city plan of Jankang in Eastern Jin dynasty, from *History of Chinese Classical Architecture*, page: 86.

[28] Chen, Li-fang and Siang-li Yu. *The Garden Art of China*. Portland, Oregon: Timber Press 1986. 9. *History of Chinese Classical Architecture*. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 85 - 86.

favorable growing conditions, including adequate precipitation and water resources, natural scenery was often employed in gardens. Since that time, Chinese imperial gardens and private gardens have developed simultaneously.<sup>[29]</sup>

Turbulent political situations and frequent wars resulted in the unaccustomed prevalence of religion. Buddhism was imported from India, and Taoism was developed in China. Both of them encouraged the construction of temples. Starting in the Northern Wei Dynasty, many temples and pagodas were built within beautiful mountain sites causing scholars and retired officials to migrate to these areas.<sup>[30]</sup> As a result, an unique style of Chinese gardens, temple garden, emerged. Traditional Chinese gardens were enhanced by the attraction of these natural landscapes. Temples attracted both pilgrims and sightseers.<sup>[31]</sup> (Fig. 13)

The periods of the Wei, Jin, and Southern and Northern Dynasties were a turning point in the history of the Chinese garden. The removal of the capital from the north to the south of China caused considerable influence on the development of Chinese imperial and private gardens. Principles of Chinese painting and literature were integrated into the garden design, particularly in south China. Chinese aesthetic ideology, combined with natural scenery, marked a new style of Chinese gardening for that time.<sup>[32]</sup>

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[29] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 7.

[30] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 83, 87 and 101.

[31] Feng, zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 8 - 9.

[32] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 12.

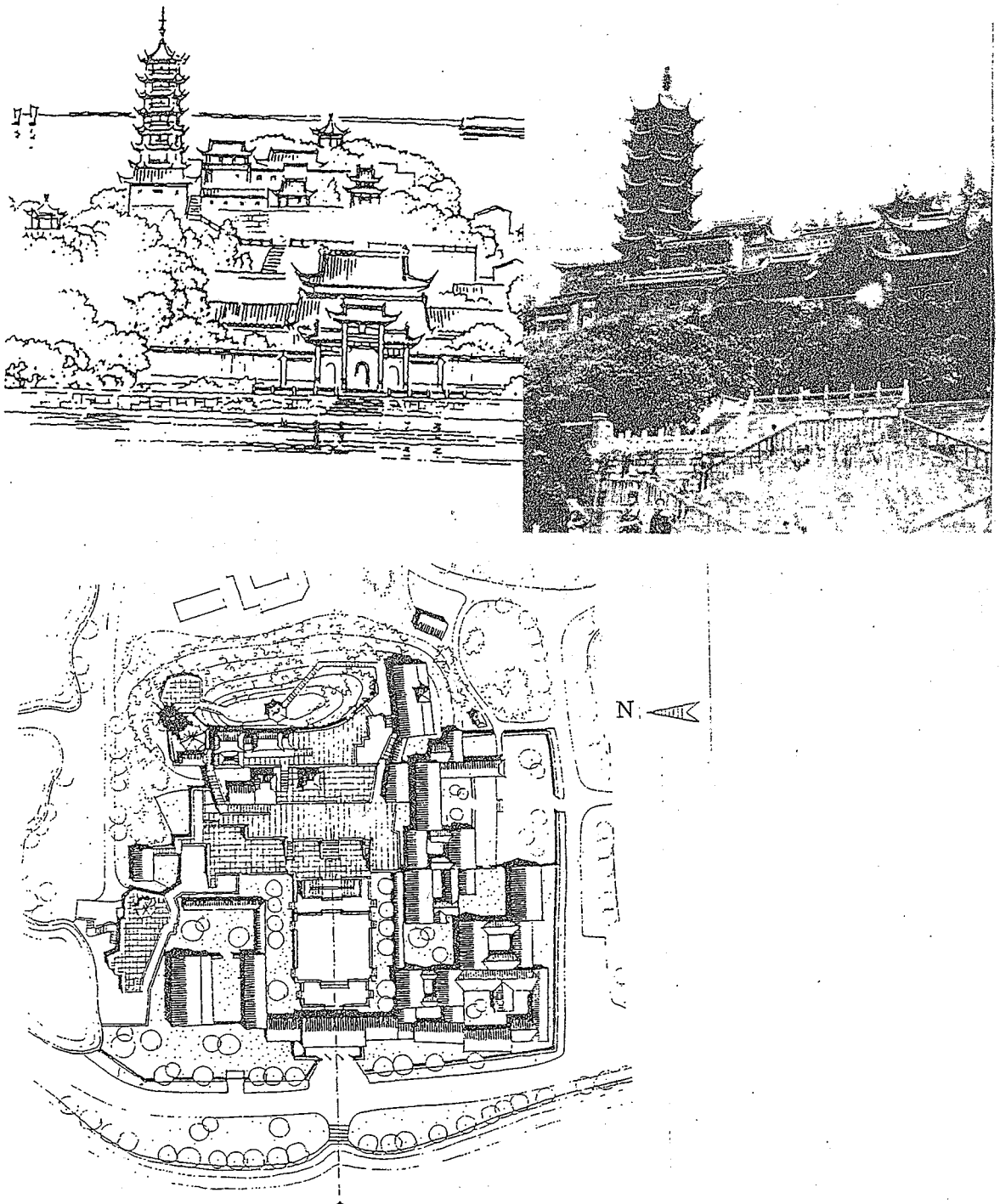


Fig. 13 Golden Hill Temple, Zhengjiang, Jiangsu,  
from Chinese Garden Architecture, page: 106.



## 2. 3. THE SUI (A. D. 581 - 618) AND TANG (A. D. 618 - 907) DYNASTIES

In the last years of the sixth century, the warfare and turmoil that the Chinese people had suffered for three centuries was finally brought to an end. From the Sui to the Tang Dynasties, the development of the Chinese feudal society peaked and improved classical Chinese architecture was inaugurated.

During the Sui and Tang Dynasties, capitals were established in both the east and the west. They were Chang'an (now Xi'an City, Shanxi Province), the western capital, and Luoyan (now Luoyan City, Henan Province), the eastern capital.<sup>[33]</sup> The Sui emperor, Yang Guang, undertook the creation of an imperial garden, the Western Garden, in Luoyang. According to historic record, a large lake was the center of this Western Garden, with several islets, buildings and terraces built inside the lake. This style had been originated during the Han Dynasty. Canals surrounded the northern bank of the lake, forming sixteen distinctive small courtyards. The entire garden consisted of diverse scenic areas with every two independent building groups separated by trees and water. This garden embodied the embryonic form and design of a large Chinese imperial garden.<sup>[34]</sup>

The Tang Dynasty was one of the most profoundly glorious and productive ages of cultural development and artistic expression in Chinese history. Its burgeoning economy and the flourishing literature and arts were made possible by a powerful and stable political situation. It was at this time that garden achieved their greatest development.

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[33] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 123.

[34] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 10.

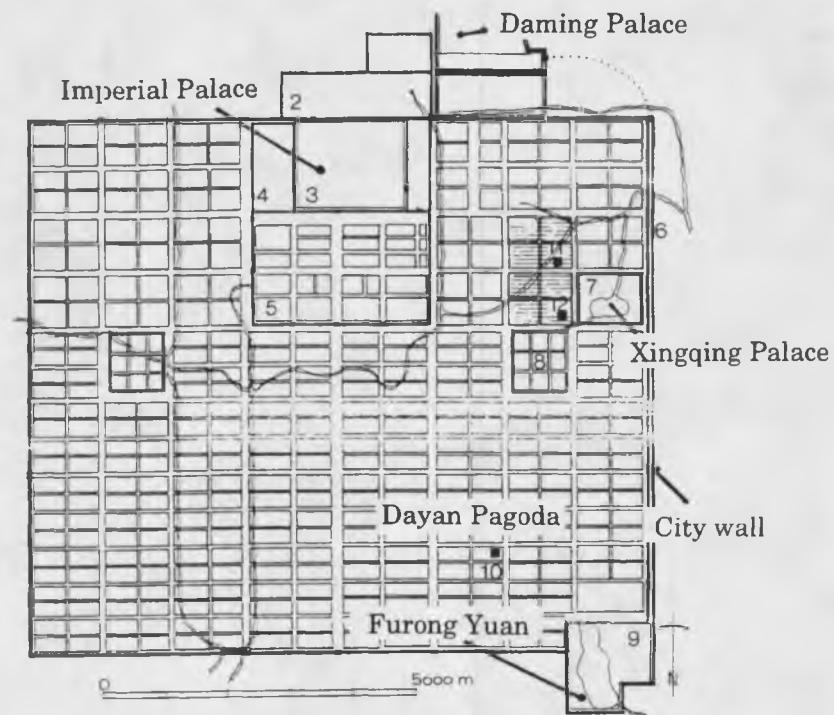
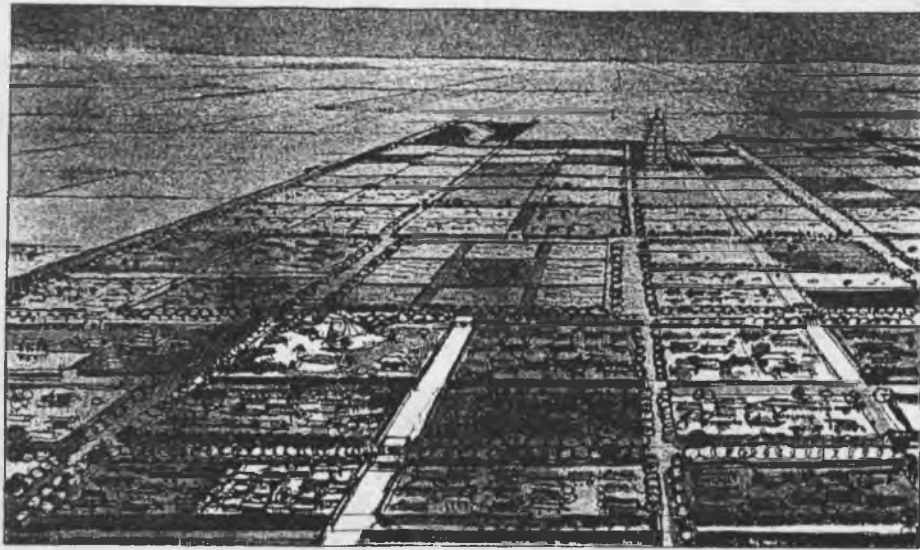
In Chang'an (now Xi'an City), the Furong Yuan (Cotton Rose Hibiscus Garden) was built in the southeast of the city. (Fig. 14) Although it was an imperial garden where the emperor entertained his court, the common people were not excluded from its pleasures during brilliant and spectacular annual festivals. Many pavilions, covered walkways, terraces and lofts were built and open to the public. This may be the earliest constructed urban public park in Chinese history. A verse described the scenery of Furong Yuan during the Mid-Spring Festival in China:

Reins of jade and whips of gold,  
 Engraved chaises with embroidered wheels,  
 Pell-mell jostling,  
 Hugger-mugger rumbling,  
 The tents of a thousand families spread halcyon-blue,  
 The dust of many neighborhoods congealed with perfume;  
 Son of Lord or grandson of Prince -  
 He is not avid for an Assembly at Orchid Kiosk;  
 Moth-eyebrows and cicada-lovelocks -  
 From afar she might be a Person of the Lo Estuary." [35]

The Huaqing Palace, an imperial garden originally built in the Qin Dynasty, was built at the foot of Li Mountain (12 miles east of Xi'an City), and reconstructed in site in A. D. 644. Here, a nearby hot spring is the essential gardening element that supplies numerous ponds, occupying places of importance, with water. At the foot of the mountain, buildings were placed

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[35] Johnston, R. Stewart. Scholar Garden of China-A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, new york, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 12 -13.



**Fig. 14** Plan and bird's-eye view of Chang'an City in Tang dynasty, from *Scholar Gardens of China - A study and analysis of the spatial design of the Chinese private garden*, page: 14 and 17.

within natural topography, to form palace groupings. The connection of mountains with water, and palaces with gardens, was similar to the plan of the imperial gardens in the later Qing Dynasty (A. D. 1644 - 1912). [36]

During the Tang Dynasty, imperial families and officials employed gardening principles of the Southern and Northern Dynasties. Private gardens were built beside, or behind their residents, but they also constructed villas on the outskirts which, too, were beautifully landscaped. Meanwhile, styles of Chinese landscape painting became more formalized and had a strong influence on the design of Chinese private gardens. [37]

Wang Wei, an outstanding painter and poet of this time in China, built his Wangchuan Bieshu (Country Villa) after his retirement from the Tang government. (Fig. 15) He was one of the first Chinese artists who thoroughly articulated and employed traditional Chinese aesthetic ideology which integrates the arts of poetry, calligraphy, painting and gardening. The four arts in one reflect the Chinese perception of the harmony of proper human wisdom with the natural world. [38] At that time, Wangchuang Bieshu (Country Villa) became a gardening model followed by other gardens. [39]

Another famous Chinese poet, Bai Ju-Yi, built his private garden at Luoyang (now Luoyang City, Henan Province), when he retired from a long career in the Tang government. This residential garden occupied seventeen

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[36] Chen, li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 13 - 14. Feng, Zhong-ping. Chinese Garden Architecture.

Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 10.

[37] History of Chinese Classical Architecture. ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 125. Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 15 -16.

[38] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 14 - 15.

[39] Tong, Jueng. A Record of South China Garden. 2nd ed. Beijing, China: China Building Industry Press, 1984. 22.



**Fig. 15** Paintings of Wangchuang Bieshu (County Villa), in Tang dynasty, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 18 and from A Record of South China Garden, page: 3 and 4.

acres, which included buildings, ponds and bamboo groves. There were three islets in the pond, which were linked by small bridges. The layout of the entire garden focused on the water bamboo. [40]

Because of the development of Chinese lyrical landscape painting and poetry, romantic expression of poetry and painting merged with garden design during the Tang Dynasty. Since that time, gardening has developed to an ever higher level.[41]

## 2. 4. THE SONG (A. D. 960 - 1279) AND YUAN (A. D. 1271 - 1368) DYNASTIES

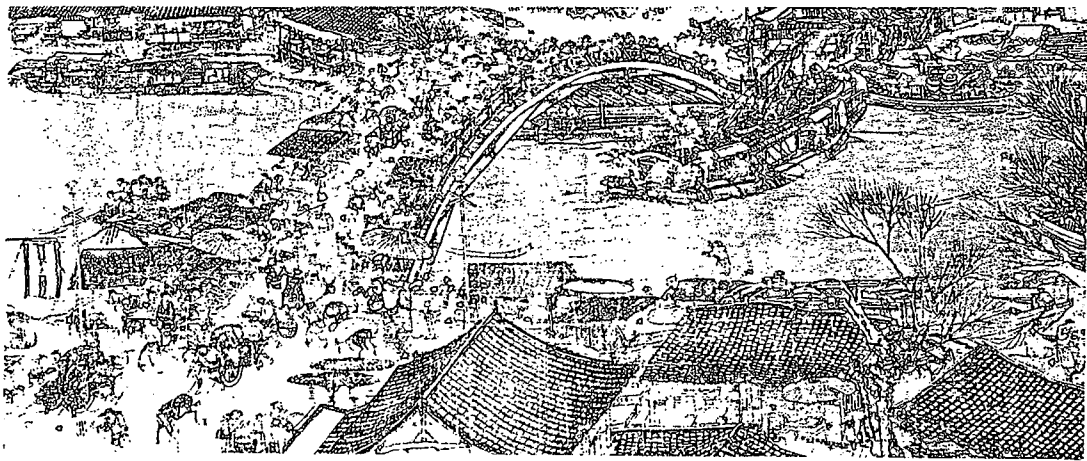
During the latter part of the Tang Dynasty, China entered into a period of chaos and war, which was Five Dynasties (A. D. 907 - 960). The emergence of the Song Dynasty put an end to this phase, and a capital was established at Bianliang (now Kaifeng City, Henan Province). The Song Dynasty is considered to be the high point of traditional culture in Chinese history. Garden arts were advanced, not only within the context of traditional imperial gardens, but also in the widespread development of urban private gardens.

The capital, Bianliang, was located on the great plains in the central region of the Yellow River and at the middle of the Chinese Grand Canal. Convenient transportation and flourishing commerce made possible urban development, as can be seen in a famous Song Dynasty painting, Qin Ming Shang He Tu (Going up river at the Qingming Festival). (Fig. 16)

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[40] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 125.

[41] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 10.



**Fig. 16** Parts of Song dynasty painting “Going up river at the Qingming Festival”, from history of Chinese Classical Architecture.

The most noteworthy imperial gardens of the Song Dynasty were Gengyue Yuan (Gorgeous Mountain Resort) and Jingming Lake. The former was located outside of the palace city and northeast of Bianliang City. It was a large imperial garden which took six years to be completed, and then it was destroyed in the late Northern Song Dynasty. This garden included man-made valleys and islets with rocks. All of the rocks came from the area of Lake Tai, on the lower reaches of the Yangtze River. Records indicate that

new and unusual characteristics were to be found at Gengyue Yuan. Gengyue Yuan was not like the gardens of the Han and Tang Dynasties, which made use of beautiful, natural surroundings. Its designers applied man-made devices to create natural scenery and to express artistic feeling. The subjective human emotion, such as the understanding and pursuit of natural beauty, had been incorporated into the garden design. Secondly, some flexible and varied gardening skills were applied in Gengyue garden. Although this garden was a low-lying land, some hills and valleys were built to modify the topography, and ponds were dug to draw the water coming from rivers. Its achievement of these aspects was a significant mark in the development of Chinese garden and deeply influenced the following garden designs. [42]

Jingming Lake, another imperial garden, was located outside the city walls of Bianliang. A Song Dynasty painting shows that several pavilions, halls and small docks were built around a lake inside this garden. (Fig. 17) In the middle of the lake, a little islet, on which covered walkways and lofts were built, was linked to the lake shore by a bridge. Because boating games were often held to please the emperor, the layout of this garden differed greatly from the general, natural landscape. [43]

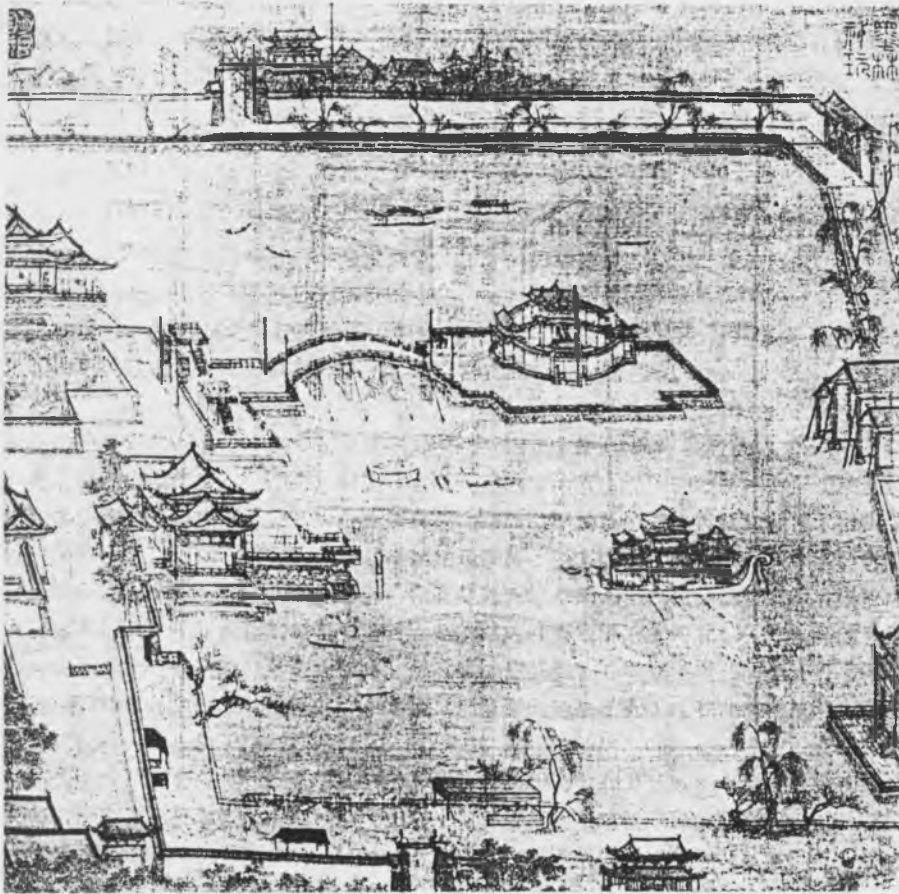
In A. D. 1127, the Northern Song Dynasty (A. D. 960 - 1127) was destroyed by northern tribes. The Southern Song Dynasty was established in A. D. 1127, and its capital was relocated to Ling'an (now Hongzhou City, Zhejiang Province). With the government moving to the south, northern

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[42] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 180. Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 10 - 11.

[43] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 180.





**Fig. 17** Song dynasty painting “Competition in Jingming Lake”,  
from History of Chinese Classical Architecture, page: 180.

officials, educated people and merchants also moved to the southern areas of the Yangtze River. They took with them an advanced culture and technology. Some of the southern cities, such as Wuxing, Pingjiang (now Suzhou City), evolved into the more favorable residential areas for officials and nobles. As a result, this region (Jiangsu and Zhejiang Provinces) became one of the most flourishing areas of economic development of that time. These factors,

coupled with ideal climatic conditions, improved the development of imperial and private gardens. [44]

Hangzhou City is famous for its beautiful West Lake which was developed during the middle of the Tang Dynasty. West Lake became a primary focus, when the capital was moved to Hangzhou. At that time, there were ten well-known scenic spots at West lake that had been completed. One of them is the Santan Yinyue (Three Towers Reflecting the Moon). It is unique in that it is an island garden, lying in the southern part of the lake and about a mile off the north shore. Cross-shaped dams and bridges divide this island into four small water surfaces which are surrounded by banks. Across the banks are a series of buildings linked by walls and paths. From the landing stage on one side of this island to its counterpart on the opposite side, this architectural spine is the controlling feature of the spatial organization of this garden. That a lake is in an island is the major feature of this scenic spot.[45] (Fig. 18)

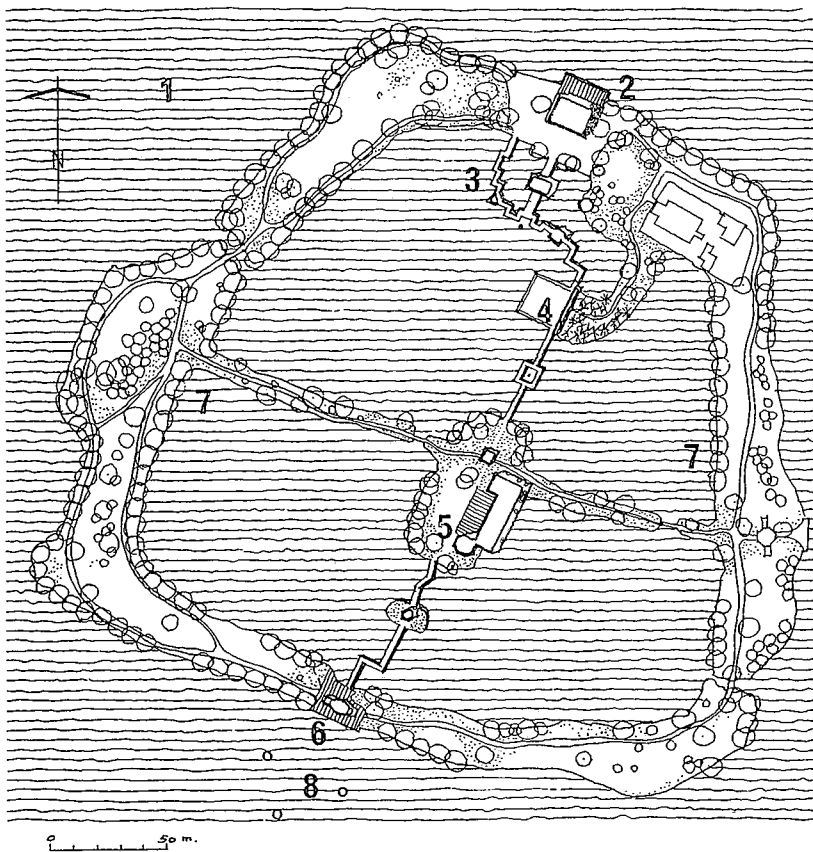
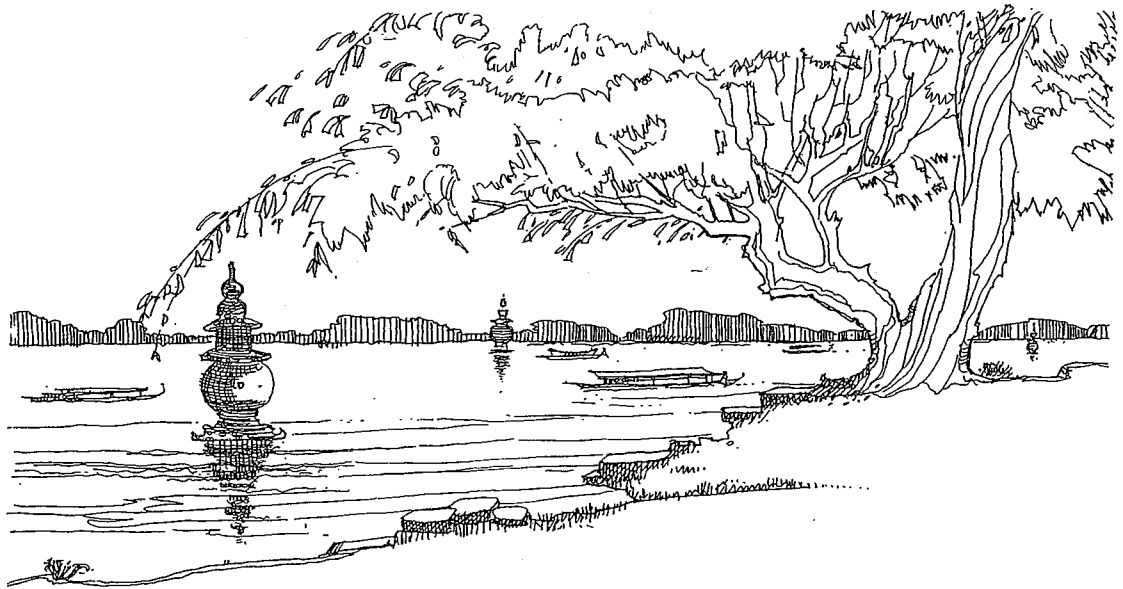
At this same time, many imperial and private gardens were built around the lake.

According to the paintings of the Song Dynasty, some of the private residences of South China were built by utilizing natural surroundings. The buildings were placed near-by hills, or within ponds. At that time, painters and poets became involved in the design process of gardens. As a result, gardens incorporated literature with landscaping painting in a closer

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[44] A Brief Chinese History. Ed. Zhong-jueng Gao. 2nd ed. Beijing, China: People's Education Press, 1980. 231 - 232. Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 12.

[45] Johnston, R. Stewart. Scholar Garden of China-A study and analysis of the spatial design of the Chinese private Garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 258 - 264.



**Fig. 18** Santan Yinyue (Three towers reflecting the moon), Hangzhou, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 258 and 264.

relationship than had ever before been known. This was a significant time in the development of the Chinese garden.<sup>[46]</sup> (Fig. 19)

Mongolian ruled China and established the Yuan Dynasty in A. D. 1271, after they had destroyed the Song Dynasty. The capital of the Yuan Dynasty, Dadu (Great Capital, now Beijing City), was planned and built in the northern area of the North China Plain. During this period, because of continuous warfare and serious national strife, the construction of gardens ceased, with the exception of Taiyechi Lake in Dadu and some private gardens in the south of China.<sup>[47]</sup> (Fig. 20)

## 2. 5. MING (A. D. 1368 - 1644) AND QING (A. D. 1644 - 1911)

### DYNASTIES

The Yuan Dynasty was overtaken by the Ming Dynasty in A. D. 1368. The first Ming emperor, Zhu Yuan-zhang, established his capital in Nanjing (now Nanjing City, Jiangsu Province), which was moved to Beijing in A. D. 1403.

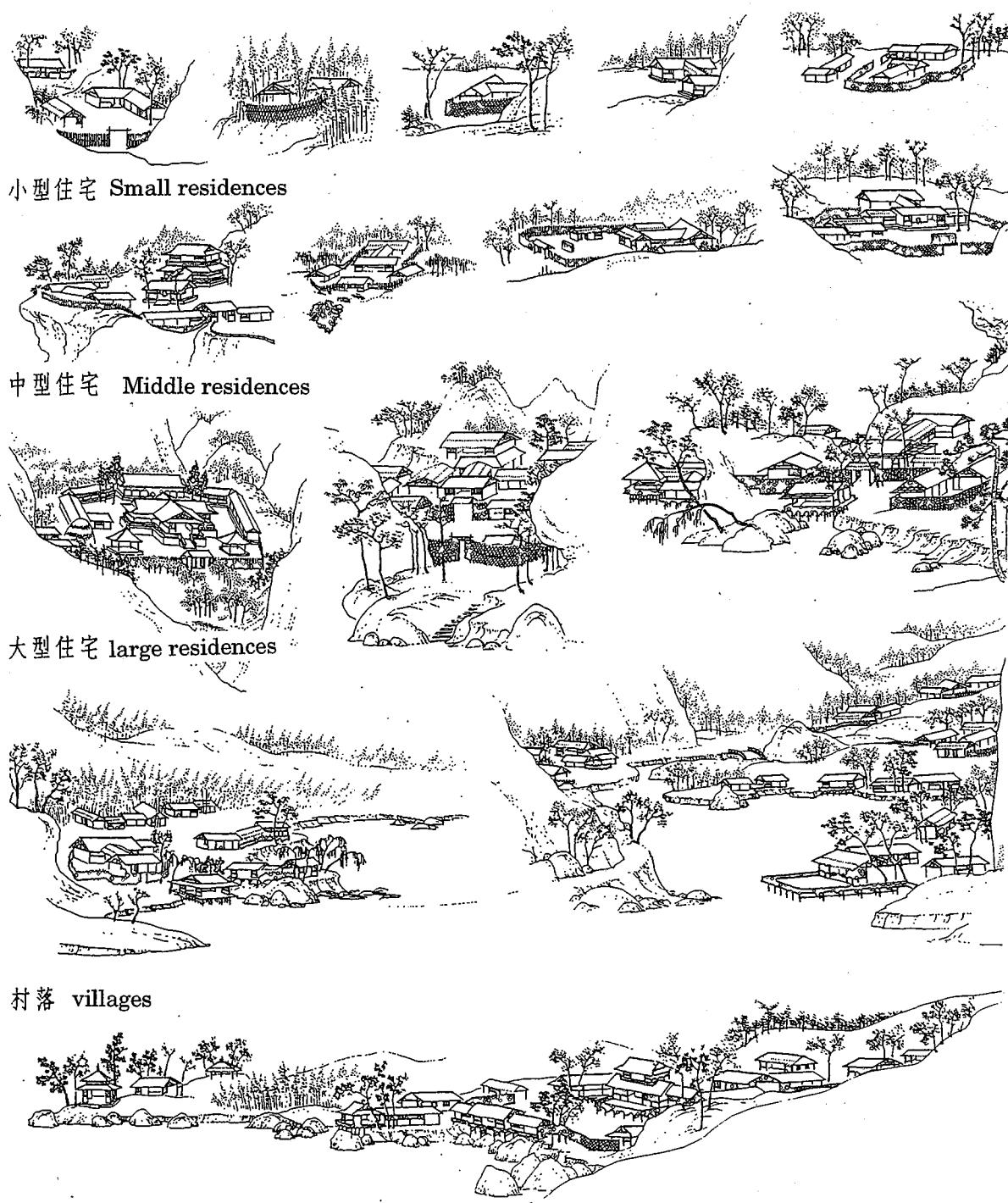
During the more than 270 years of the Ming Dynasty, gardening and its corresponding architecture flourished, as the direct result of an economic recovery. Gardening design and composition was improved greatly over that of the Tang and Song Dynasties in most areas of southern and northern China. For the first time, systemic literature discussing gardening theory emerged.

Qing Dynasty garden design imitated the traditions of the Ming Dynasty. During the Qing's 267 year history, a climax of quantity and quality was

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[46] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 183 - 187.

[47] Feng, zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 17 - 18.



**Fig. 19** Residences of Song dynasty in a painting,  
from History of Chinese Classical Architecture, page: 185.

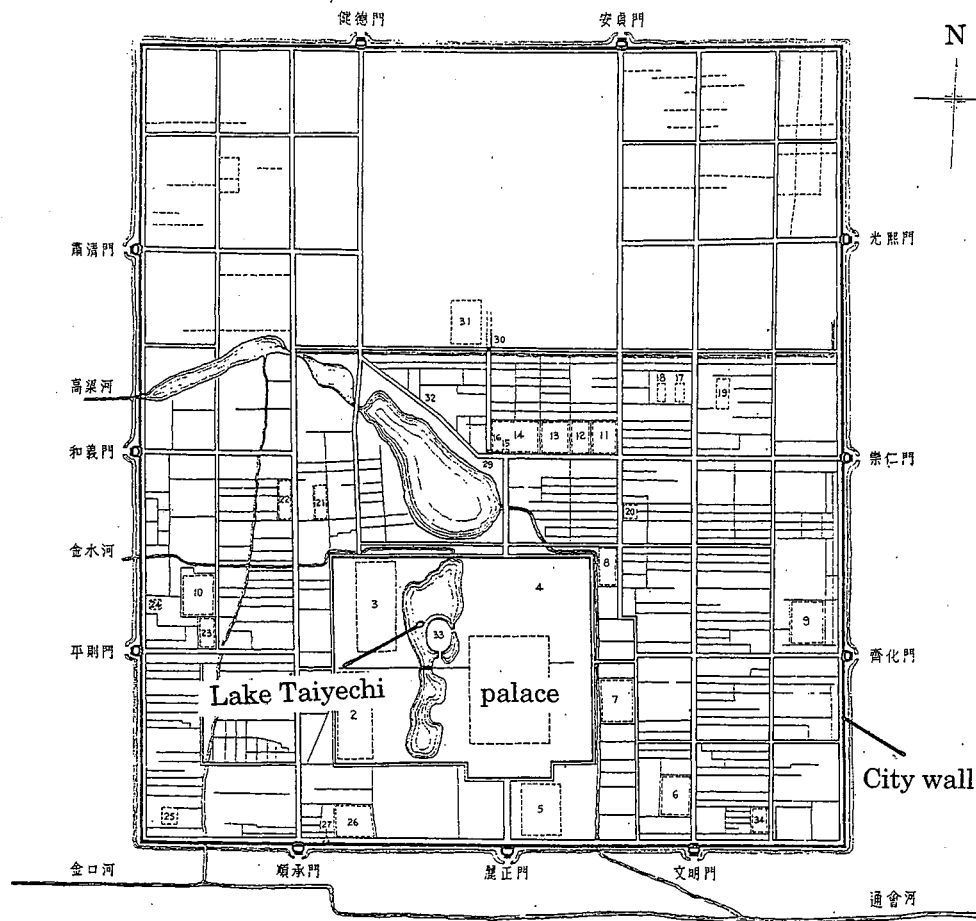


Fig. 20 An imaginary city plan of Dadu in Yuan dynasty,  
from History of Chinese Classical Architecture, page: 269.

achieved by the building of numerous gardens with various forms and styles. Most of the classic imperial, private and temple gardens existing at present time were built during the Ming and Qing Dynasties.

### 2. 5. 1. Imperial and private gardens: Outstanding quantity and quality

The Ming and Qing Dynasties both placed their capitals in Beijing City, which had been the original capital of the Yuan Dynasty. (Fig. 21) Several large imperial gardens were built in Beijing. With the exception of the Xi Yuan (Western Garden), at the western side of the Forbidden City, most of the imperial gardens were located in the beautifully landscaped areas of Beijing's northwest suburbs<sup>[48]</sup> (Fig. 22) The Western Garden, originating from the Taiyechi Lake of the Yuan Dynasty, consists of three lakes, Beihai (North Sea), Zhonghai (Central Sea) and Nanhai (South Sea). This long and narrow series of lakes was sandwiched between the Forbidden City and the Western Palace which was destroyed during the Qing Dynasty. These three lakes create a spacious, quiet and beautiful scenic area. <sup>[49]</sup> At the present time, the Beihai (North Sea) garden has been opened as a public park, while the other two lakes continue to be occupied for governmental agencies.

(Fig. 23)

The imperial gardens in the suburban areas of Beijing are Yuanming Yuan, Qingyi Yuan (now Yihe Yuan, or the Summer Palace), Jingyi Yuan, Jingming Yuan and Changchueng Yuan. Yuanming Yuan was known as the "Garden of Gardens", but it was destroyed by British and French forces in A. D. 1860.<sup>[50]</sup> (Fig. 24)

[48] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 303.

[49] Hu, Dong-Chu. The Way of the Virtuous-The influence of art and philosophy on Chinese Garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 105 - 108.

[50] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 303.

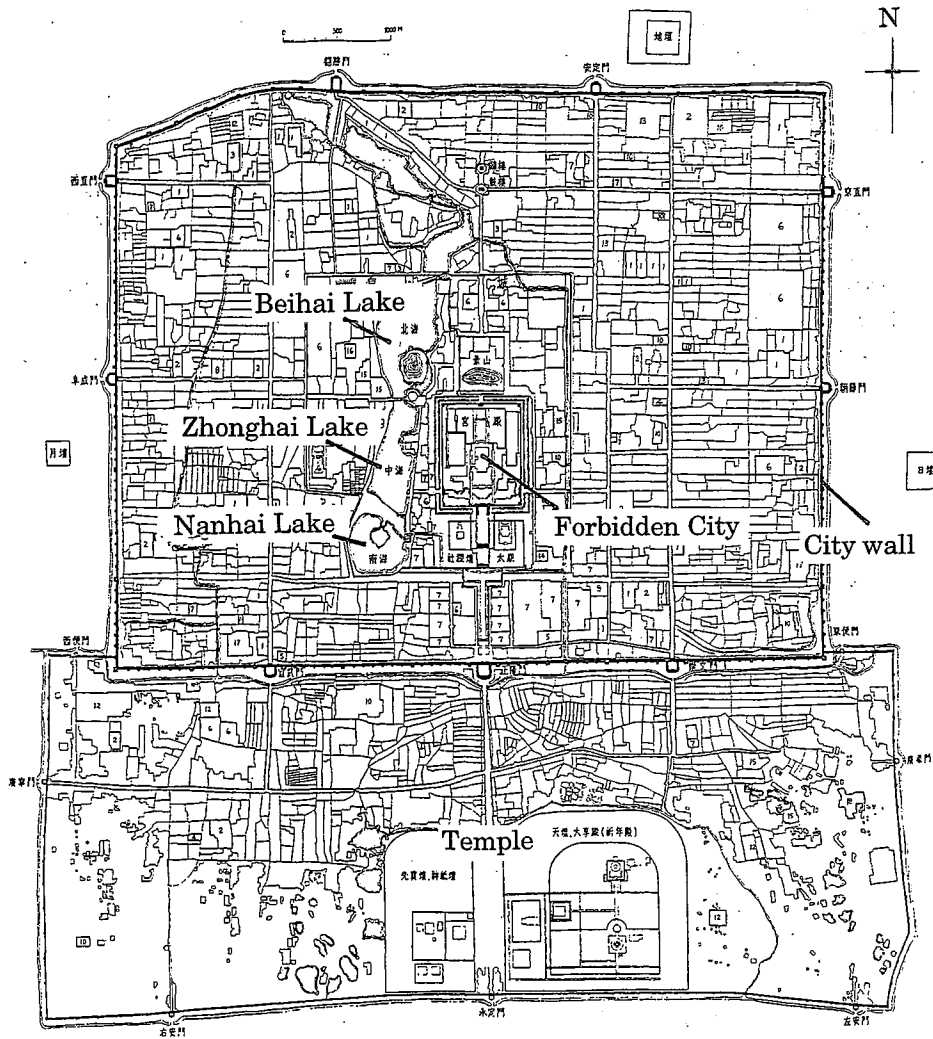


Fig. 21 Plan of Beijing City in Qing dynasty,  
from History of Chinese Classical Architecture, page: 290.

The most well-known imperial garden existing today, the Summer Palace, is located 16 miles northwest of Beijing. This garden measures 1.3 sq. miles, with one-third of the northern portion occupied by Longevity Hill, 197 feet high. Most of its garden buildings are located on or around Longevity Hill. In A. D. 1703, a travel palace was built on this garden site, and in A. D. 1750, construction began on a large-scale garden. In A. D. 1860, the Summer Palace was nearly destroyed by English and French troops. However, in A. D. 1888,



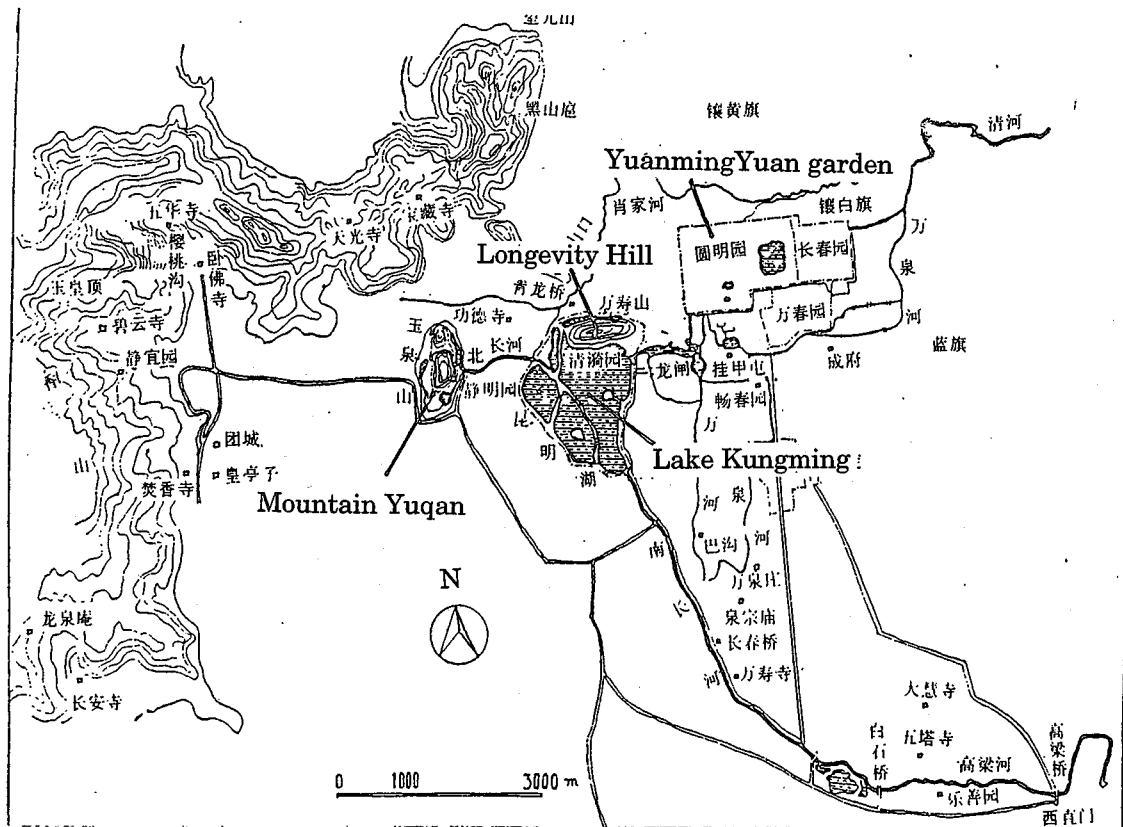


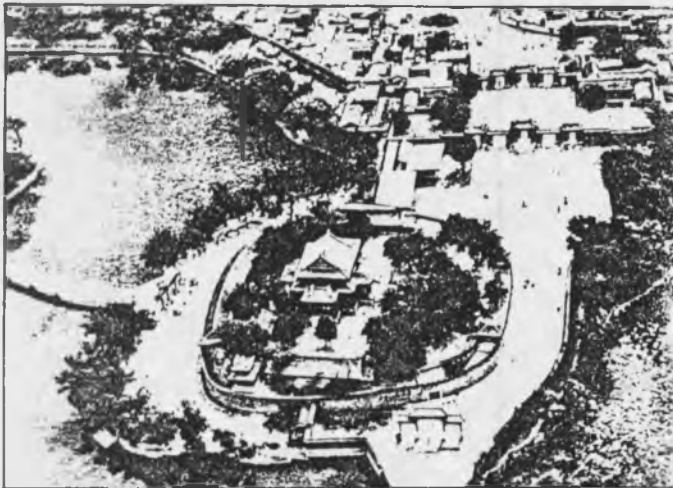
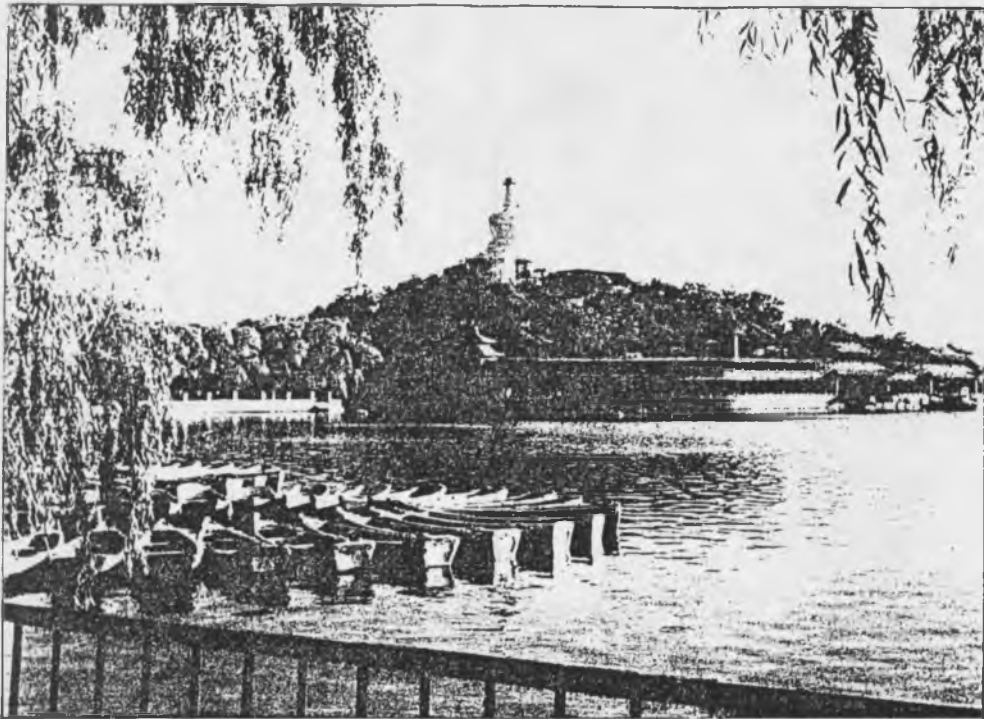
Fig. 22 A sketch map of gardens in western suburb of Qing dynasty, from Chinese Garden Architecture, page: 18.

most of the repairs were completed and the original layout was preserved. [51]

(Fig. 4)

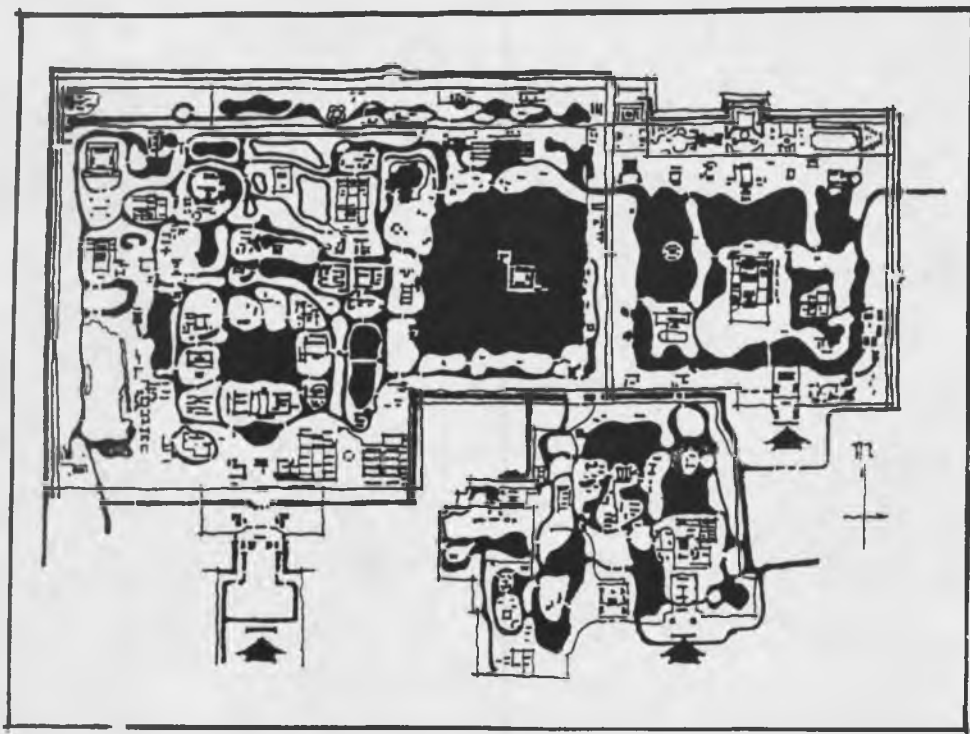
The design of the Summer Palace took full advantage of natural hills and water. Longevity Hill is a natural hill, although several of the stones on the hill came from the Lake Tai area (south China) and nearby hills. The water surfaces are divided into Front Lake (Kunming Lake) on the southern side of the hill, and Rear Lake on the northern side of the hill. Kunming Lake is formed naturally, receiving its water from springs on the nearby mountains. This lake is so broad that islets, bridges and dams are used to separate it and to create spatial depth and variance. (Fig. 25) Rear Lake is a narrow and

[51] History of Chinese Classical Architecture. Ed. Dun-zhen Liu. 2nd ed. Beijing, China: China Building Industry Press, 1984. 304.



**Fig. 23** Beihai Lake and garden, Beijing, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 105 and 106.

winding river, which is sandwiched in between waterside streets, imitating Suzhou streets, shops and houses. This layout attempted to provide the imperial families with a sense of having arrived in south China. (Fig. 26) At the eastern end of Rear Lake, a small garden, Xiequ yuan (Garden of Linked Charms), is located. Its style is that of a south China private garden and it



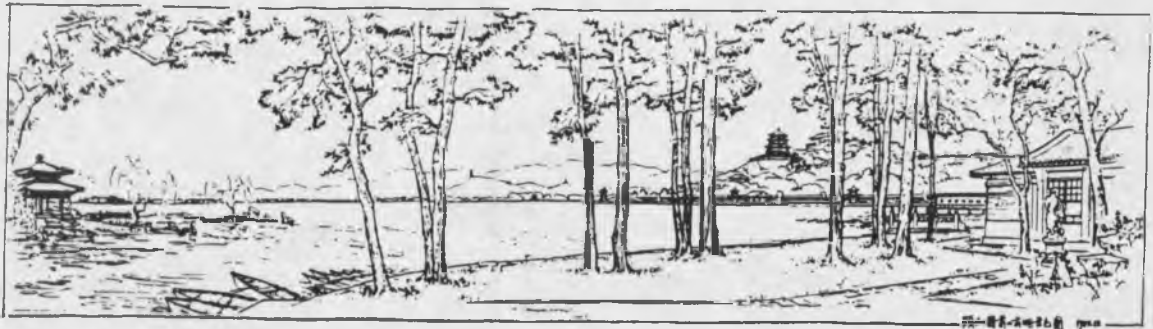
**Fig. 24** An imaginary plan of Yuanming Yuan, Jichueng Yuan and Changchueng Yuan Gardens, after Cathay's Idea-Design theory of Chinese classical architecture. Page: 330 and 331.

was the emperor's favorite retreat during the summer. [52] (Fig. 27) Garden styles of north China, particularly imperial gardens, were influenced strongly by the garden designs of south China during the Ming and Qing Dynasties.

At the beginning of the Yuan Dynasty, private gardens were also developed in Beijing. When Beijing became the capital of the Ming and Qing Dynasties, fifty-three private gardens in the Ming Dynasty, and more than hundred gardens in the Qing Dynasty were recorded.

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[52] Hu, Dong-zhu. The Way of the Virtuous-The influence of art and philosophy on Chinese garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 113-118.



**Fig. 25** Front Lake and Hill of Summer Palace, Beijing, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 114 and from Chinese Garden Architecture, page: 122.

The Sui and Tang Dynasties inaugurated the movement of economic centers to the middle and lower of the Yangtze River. This became more prevalent during the Ming and Qing periods. Transportation centers in south China for the importation of goods, such as Yangzhou, Suzhou, Hangzhou and Nanjing, were expanded. This economic development promoted the prosperity of the local culture. These cities attracted numerous officials, rich merchants and educated persons who wished to reside in such prosperity. Subsequently, many private gardens were built at that time. According to the Records of Suzhou City, there were two hundred seventy-one Suzhou gardens



**Fig. 26** Rear Lake of Summer Palace, Beijing, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 115 and from history of Chinese Classical Architecture, page 305.



**Fig. 27** Xiequ Yuan (Garden of Linked Charms) in Summer Palace, Beijing, from The Way of the Virtuous-the influence of art and philosophy on Chinese garden design, page: 117.

built during the Ming Dynasty, and one hundred thirty gardens built during the Qing Dynasty. Over one hundred of these popular gardens remained during the nineteen fifties. [53]

### **2. 5. 2. The distinctive characteristics of imperial and private gardens**

During the Ming and Qing Dynasties, four basic styles of Chinese gardens emerged, imperial garden, private garden, temple garden and naturally landscaped gardens. Developed to a state of excellence, each type had unique characteristics of site layout, spatial organization and architectural style.

The Imperial Summer Resort in Chengde City, Hebei Province, was built between A. D. 1702 and 1792. It is an architectural treasure with a beautifully landscaped garden. It served as a symbol for the political and religious unification of the Qing Dynasty and for many nations bordering China on its northern and western frontier. Its architectural style includes those of several cultures and religions, including Han, Mongolian, Tibetan Lamaism and Mohammedanism. The regional style of landscaping has been replicated, as well. This resort embodies an assemblage of architecture, landscape design and politico-cultural philosophies. [54] (Fig. 5)

South China garden is an excellent example of a Chinese private garden. These gardens are located in urban or suburban areas and are an extension of the main residence. Small size and occupancy are major characteristics. In garden design, skills, such as contrasting, off-setting, and view "borrowing"

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[53] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 18 - 20.

[54] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 20.

may be used to create rich scenery within small environment. South China garden represents a major achievement in Chinese gardening arts and techniques. [55]

### 2. 5. 3. Definitive gardening literature

Written descriptions of ancient Chinese gardens before the Ming and Qing Dynasties can be found in local records, literary history and painting. Since the Ming and Qing Dynasties, gardening has become a specialized field, with extensive development. One of the books which has emerged is, The Craft of Gardens, written by Ji Cheng, a garden designer of the Ming Dynasty. It is the first general manual about traditional Chinese landscape gardening. [56] The writer describes a method of gardening by applying ten specific themes. They are the site selection, layout, decoration, doors and windows, walls, pavement, hill construction, and selection of election of rocks and utilization of natural scenery. Some of these principles serve as a summary for the art of Chinese gardening. Although this book focused on the creative experience of Chinese private gardening, its theories and ideals make significant reference to other garden styles.

The classical Chinese garden reached its apex by the end of the Qing Dynasty (A. D. 1911), according to the History of Chinese Classical Architecture. Using this review of history, an outline for the development of the garden in China has been traced. From its origin, two thousand years

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[55] Feng, zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 24.

[56] Ji, Cheng. Translator's Preface. The Craft of Gardens. By Alison Hardie. New Haven and London: Yale University Press, 1988. 9.

ago, as a natural area used as a hunting park for the imperial family, to the carefully and artfully designed gardens of the Ming and Qing dynasties, the Chinese garden is a historical monument to coherent theory and practice.



# 環境

ENVIRONMENT

# 佈局

LAYOUT



### CHAPTER THREE:

## AN ANALYSIS OF SCENIC DESIGN IN THE SUZHOU PRIVATE GARDENS

There are three main phases in the design process of Suzhou private gardens: the placing of objects, the organization of space and the organization of movement.<sup>[57]</sup> The placement of gardening elements includes their setting, selection and arrangement. Layout is of primary importance when creating an ideal private garden.

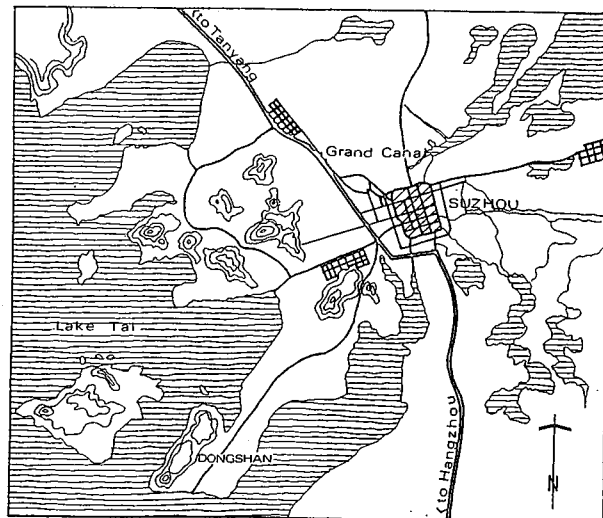
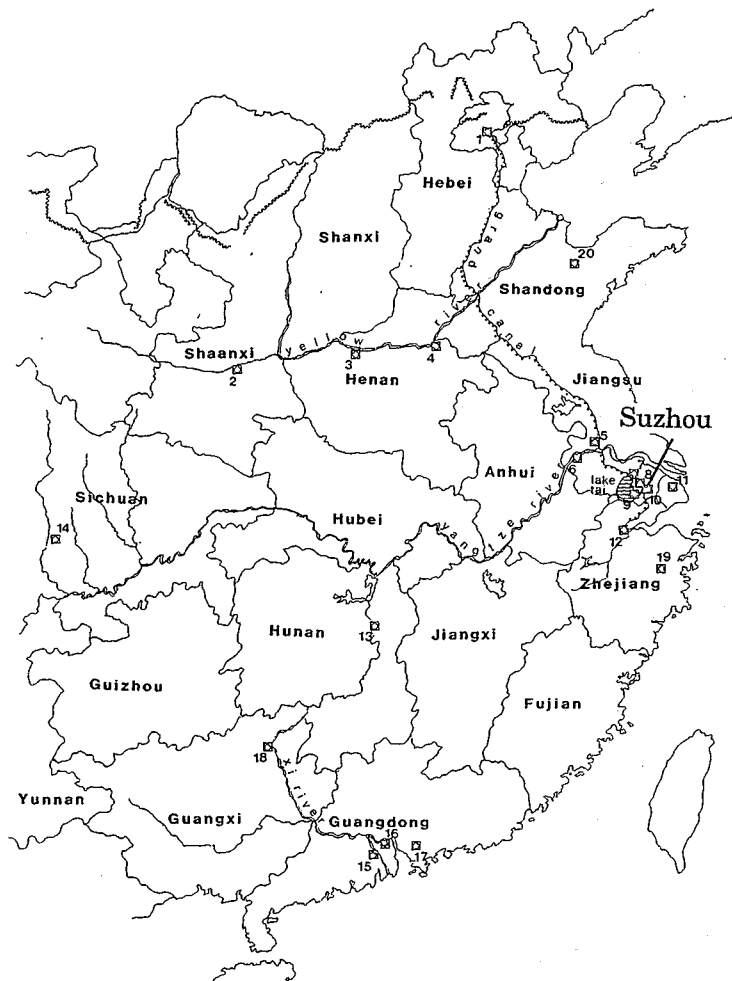
Suzhou City is situated in the southeast of Jiangsu Province and a few miles east of Lake Tai. This huge lake measures 936 sq. miles and is one of five large freshwater lakes in China. China's Grand Canal runs through Suzhou City from south to north. A range of hills lies to the northwest between the lake and the city. An extensive network of rivers and lakes flows to the northeast from Lake Tai to the Yangtze River. They provide the principal means of irrigation and water transportation for this region.<sup>[58]</sup> (Fig. 28)

Gardening conditions in cities similar to Suzhou are nearly perfect. Social and economic development in this area has always provided an ideal environment, while a favorable climate and topography create excellent gardening conditions.

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[57] Johnston, R. Stewart. Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 74.

[58] Cao, Zi-fang and Nai-fu Wu. Suzhou. Ed. Zi-fang Cao and Nai-fu Wu. Beijing, China: China Building Industry Press, 1986. 3 - 11.



**Fig. 28** The location of Suzhou City (upper) and regional setting of Suzhou (right), from Scholar Gardens of China -A study and analysis of the spatial design of the Chinese private garden. page: 6 and 22.

A description of natural landscaping and the art of gardening is customarily joined with human emotion. The layout of a Suzhou private garden is related to the viewer's sense of beauty and to natural order. Because the Suzhou garden is a residential garden located within an urban area, its main purpose is to imitate natural scenery, to express traditional, artistic philosophies and to create a comfortable personal residential surrounding.<sup>[59]</sup> When utilizing this practical gardening environment, the basic gardening elements which include buildings, rocks, hillocks, water, flowers and assorted foliage should be considered carefully and selected at the time of design and planning. Attractive water-abraded limestone, which come from the Lake Tai area, is important to the building of rockeries in Suzhou gardens. However, ideal individual elements do not constitute a complete or well-composed garden. The integration of gardening theory with practical experience has provided the basis upon which many outstanding private gardens have been created in Suzhou. As a result of improvement over a long period of time, a set of basic principles has evolved which have produced a distinctive Chinese traditional culture. The result is the connection of residential buildings with artistic gardening.

### 3. 1. PRINCIPLES OF SITE DESIGN

Most of the Suzhou private gardens were designed by ancient poets, painters and gardeners, who were able to incorporate, within spatial limits, their philosophies of natural beauty. A Suzhou private garden provides an

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[59] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. Beijing, China: Qinghua University Press, 1988. 84.

artistic environment which melts extrinsic landscaping with intrinsic emotion; natural scenery with life's realities.

To acquire this ideal environment, it is essential to select land that meets the requirements of the most desirable basic elements and surroundings. Ji Cheng (A. D. 1582 - 1634), the renowned, in China, garden designer of the Ming Dynasty (A. D. 1368 - 1644), said:

In laying the foundations of a garden you should not feel any restriction as to the direction it faces; the shape of the ground will have its natural highs and lows. There should be something to arouse interest as you pass through the gate; you should follow the natural lie of the land to obtain interesting views, whether the garden lies beside wooded hills or abuts on a stream or pool. To make good use of unusual features adjacent to the city you must keep far from major thoroughfares. To find outstanding sites in the local villages, you should avail yourself of the uneven height of deep woods. If you place your garden in a country village you can gaze into the distance; if it is in a market town it will be more convenient to reach from your home. If you are constructing the garden from scratch, then it will be easy to lay out the foundations, but for immediate effect you can do no more than plant some willows and transplant bamboo. There is more skill involved in redesigning an old garden, although you have the natural advantages of ancient trees and profusely growing flowers ..... Inner-city sites are not intrinsically suitable for gardens; if you construct a garden there, it must be in a place as secluded and out of the way as possible, so that although it may be close to vulgar surroundings the gate can be shut to keep out

the hubbub..... If you can find seclusion in a noisy place, there is no need to yearn for places far from where you live. [60]

Although this paragraph does not focus on the site selection of an urban private garden, it does describe some general principles.

Another significant influence on Suzhou private gardens is the mysticism of Feng - Shui (wind and water), a traditional Chinese philosophy which is concerned with the selection and planning of the site.[61] This theory is a form of geomancy developed in ancient China from 480 - 221 B. C. which is considered to be a mixture of science and superstition.[62]

Although Suzhou gardens have different forms and styles, there are common design features. They are: the imitation of nature, the creation of artistic environment, the employment of surroundings and scale control, and the division of viewing areas.[63]

In order to achieve these purposes, the designers of Suzhou gardens considered the following problems:

- a). The development of a sense of spaciousness in limited surroundings.
- b). The development of intrinsic emotions when the background is a geometrically enclosed courtyard .
- c). The development of natural-appearing landscapes and artistic

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[60] Ji Cheng. The Craft of Gardens. Trans. Alison Hardie. New Haven and London: Yale University Press, 1988. 44 - 47.

[61] Johnston, R. Stewart. Scholar Garden of China- A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 68.

[62] He, Rong. "Chinese Feng - Shui Theory and The Modern Idea of Natural Architecture". Master's Report. U. of Arizona, 1992. 103 - 104.

[63] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: China Building Industry Press, 1988. 76.

environments using artificial devices.<sup>[64]</sup>

Throughout a historical period, Chinese garden designers gained design experience at the site layout. They not only created architectural styles appropriate to gardening requirements and natural scenery, but they also produced numerous outstanding natural scenes that were diminutive. As a result, rules that govern gardening skills have been created and summarized. They are contrast, foil, sequence, contraposition of scenes, and utilization of existing scenery. <sup>[65]</sup> By using these principles, a variety of spatial effects can be created and diversity is found within a limited space.

The Suzhou garden is also filled with "dualism". This is exemplified by residential and garden areas that were designed under the strong influence of the philosophies of Confucism and Taoism.<sup>[66]</sup> Confucism emphasizes balance, symmetry and the etiquette of human social rank. Most of the Suzhou private gardens were occupied by ancient officials and people of education who could not escape restrictions of social order. Adhering to the Confucian thought of the cultivation of moral character and management of family relationships, a main hall was always placed at the center of a family, flanked by other rooms on the left and right sides. Formal and luxurious features were developed. Additionally, based on the Taoist philosophy which advocates flexibility and closeness to nature, a pleasant, quiet, and secluded

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[64] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: China Building Industry Press, 1988. 76 - 85.

[65] Liu, Dun-Zen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 12 - 21.

[66] Hu, Dong-Chu. The Way of The Virtuous - The influence of art and philosophy on Chinese garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 9 -11 and 38 - 39. Bodde, Derk. "Harmony and Conflict in Chinese Philosophy". Studies in Chinese Thought. Ed. Arthur F. Wright. Chicago, Illinois: The University of Chicago Press, 1953. 54.

garden was located close to the residences of the Suzhou gardens. The inhabitants could enjoy natural beauty while meditating, writing poetry or painting. Here, they could find happiness and relaxation.<sup>[67]</sup> As a result, the gardens are separated from the formal residences, but, in a sense, both sections are joined within the general plan. (Fig. 29)

Individual Suzhou gardens have different site designs, according to their size, topography and scenic elements. "They generally are smaller, occupying an average of one tenth hectare of land, with the largest not exceeding a 6 or 7 hectares. These private gardens are laid out mainly in units of small areas where scenery can be observed from a short distance".<sup>[68]</sup> In most Suzhou private gardens, the main scenic objects are placed either in front of, or behind the main hall so that the outdoor scenery may be most easily enjoyed. The main hall is centrally located to facilitate routine activities, and a garden with rocks, ponds, foliage and flowers is always placed opposite it. In addition to the main hall, there may be pavilions, covered walkways and lounges provided as secondary buildings. This area is one of significant landscaping, and is surrounded usually by several smaller courtyards which provide a variety of visual effects. (Fig. 30) Ji Cheng has expressed his thoughts about the layout of a private garden thusly:

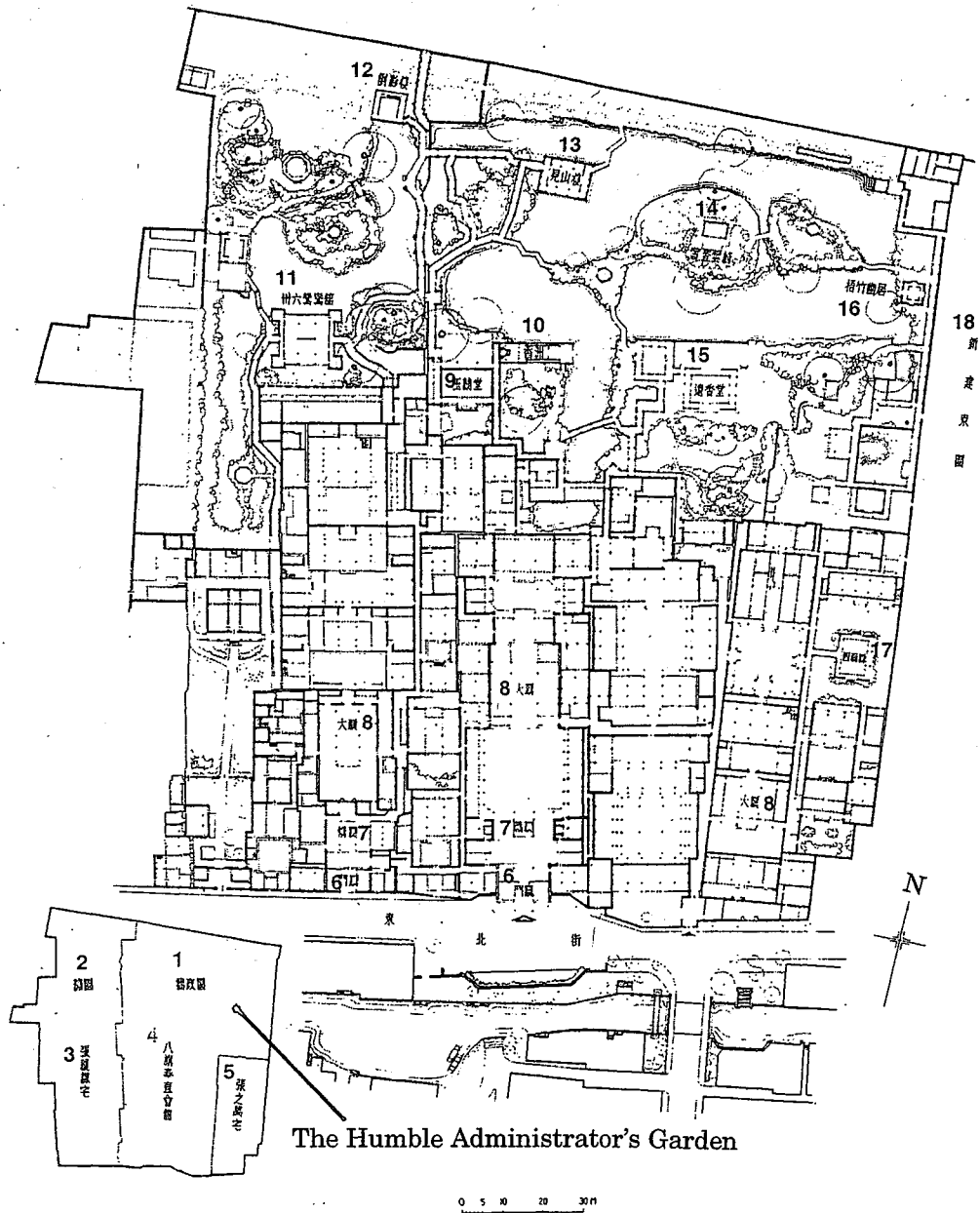
The most important element in the layout of gardens is the siting of the principal buildings. The primary consideration is the view, and it is all the better if the buildings can also face south. If there are some tall

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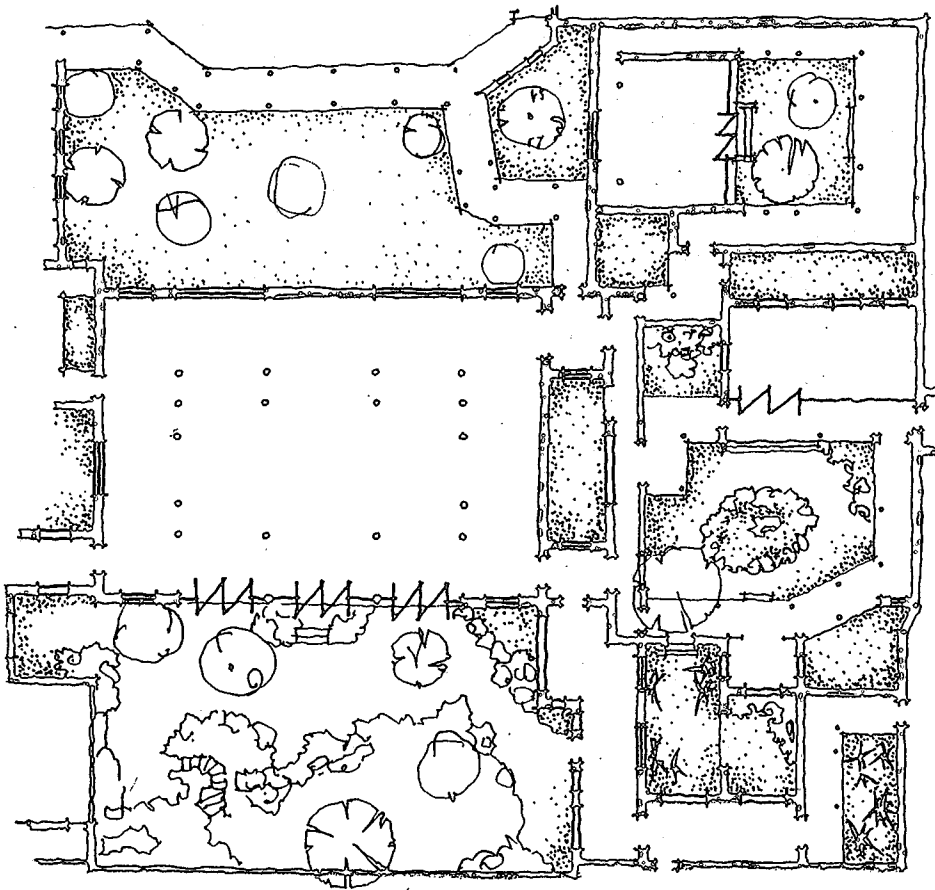
[67] Hu, Dong-chu. The Way of The Virtuous-The influence of art and philosophy on Chinese garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 17 - 18.

[68] Liu, Dun-zhen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 3-4.





**Fig. 29** Plan of Zhuozhen Yuan (The Humble Administrator's Garden) and its residences, from *Chinese Classical Gardens of Suzhou*, page: 327.



**Fig. 30** Courtyard plan of Five-Pine Celestial Hall in Lingering-Here Garden, after Chinese Classical Gardens of Suzhou, page: 368.

trees around, then keep one or two of them growing in the courtyards. When you build walls you must spread them widely and preserve plenty of open space within them, so that you can arrange and lay out the place exactly as you wish. Once you have picked a site for the main buildings, you can use the remaining space for the construction of pavilions and terraces. Their form should follow what is appropriated, and you should cultivate the plants around them very carefully.<sup>[69]</sup>

[69] Ji, Cheng. The Craft of Gardens. Trans. Alison Hardie. New Haven and London: Yale University Press, 1988. 54.

To lay out various scenic elements properly is an important aspect of gardening in Suzhou gardens. Historically, artistic principles and design skills were considered carefully and applied widely.

### 3. 1. 1. Assemblage and Divergence

Assemblage and divergence are very common in a Suzhou private garden. Assemblage defines a group of scenic elements that are organized with an integrating style or theme. For example, scenery must be distinctly defined, so that, moving from one view-point to the next, viewers will be attracted by the difference between the scenes as well as by their changing contours. This must not be confused with over-crowding. Because of site limitations, it is inappropriate to arrange too many elements in one small garden space. Divergence defines a moderate selection and arrangement of scenic elements, according to established spatial scales, gardening themes and functions.

In Shizilin (The Forest of Lions Garden) in Suzhou, most of the vistas are formed by numerous stones which resemble lions and were selected to surround the garden's pond and to stand on a rock hill. So, the garden's name and its major design characteristics were the result of this design idea. However, because too many stones and other objects were placed together, visual effects are damaged. The centrally located pond is not large enough. A half-circle of stones, placed around the pond and buildings, occupies a vast area on the east. On the west of the pond, a steep bank of rock formations causes excessive narrowing of the pond. The division of the pond by a bridge also makes the distance to the rock formations on the opposite shore too short for maximum enjoyment. A stone boat, added at a later period, creates an

even more crowded impression in the northwest corner. Aesthetic satisfaction, when viewing this garden, has been diminished because not enough attention was paid to the principles of divergence of scenery. (Fig. 31)

### 3. 1. 2. Solid and Void

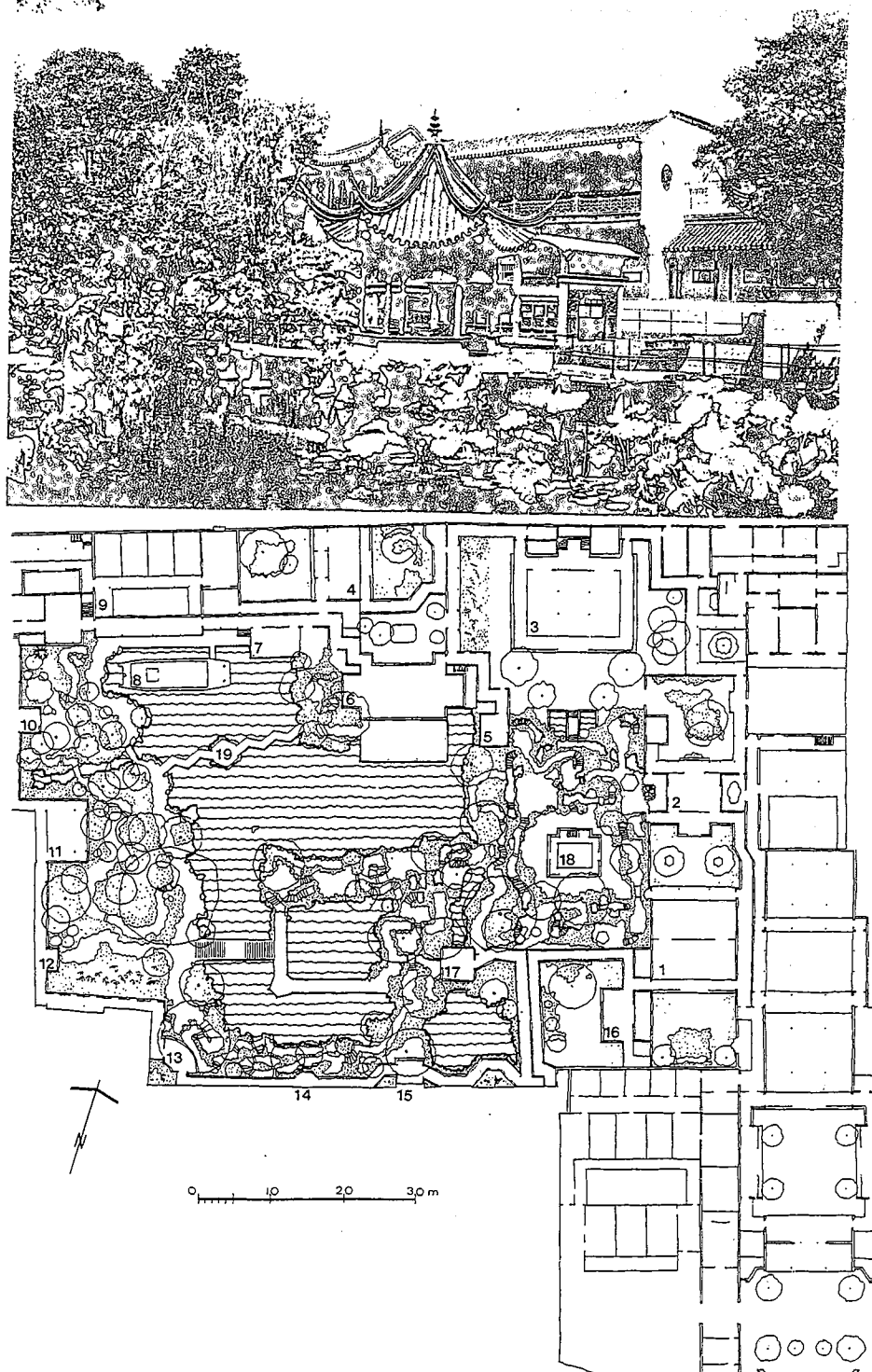
In a Suzhou garden, ground or earth signifies solid and water indicates a void. [70] In a typical Chinese garden, water is an indispensable element. Chinese Taoism purports that emptiness and calmness are two major aspects of its philosophy. "Emptiness produces a blank state", and "Water is calm and enlightening; moreover, it has this effect on the spirit". [71] Visually, the ground and hills create a solid landscape which engenders a sense of reality. Running water and water surfaces tend to produce feelings of lightness and spaciousness because of their transparent and reflective qualities. Consequently, the ratio between ground areas and water bodies will influence the entire structure of the garden. In a Suzhou garden, ground areas are larger than water surfaces, which are usually located at the center of the garden. (Fig. 32 and 33) This is a direct result of the Chinese Confucian doctrine, which espouses a moderate lifestyle. [72] Ground areas should include terraces of differing shapes, hills and rockeries, and water bodies should have irregular boundaries and various depths. When there is a proper

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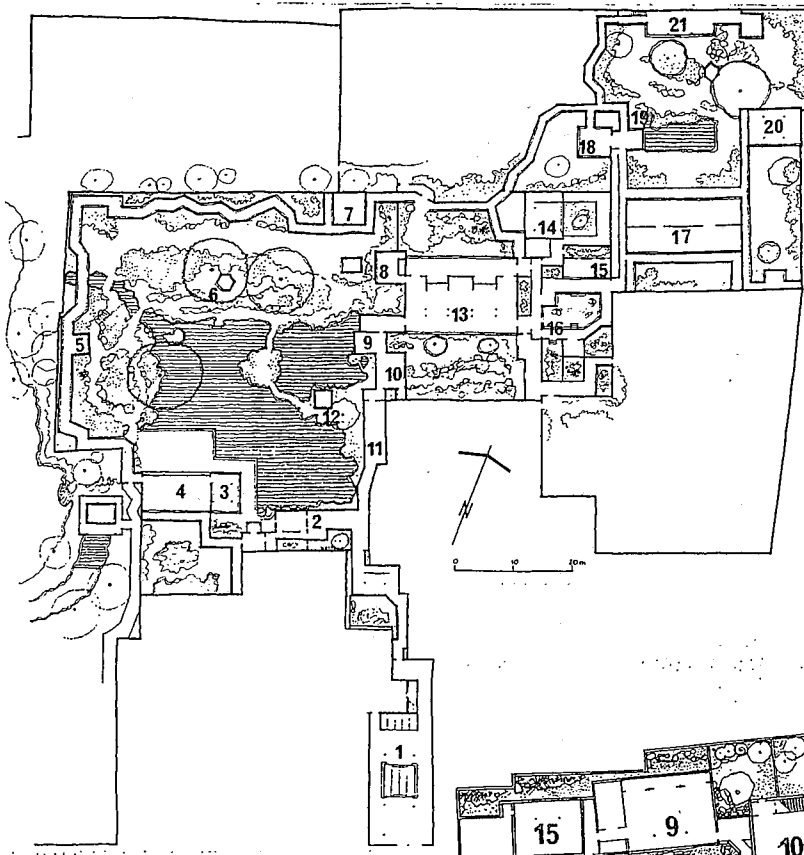
[70] Chen, Li-fang and Siang-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 39.

[71] Hu, Dong-chu. The Way of The Virtuous-The influence of art and philosophy on Chinese garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 16.

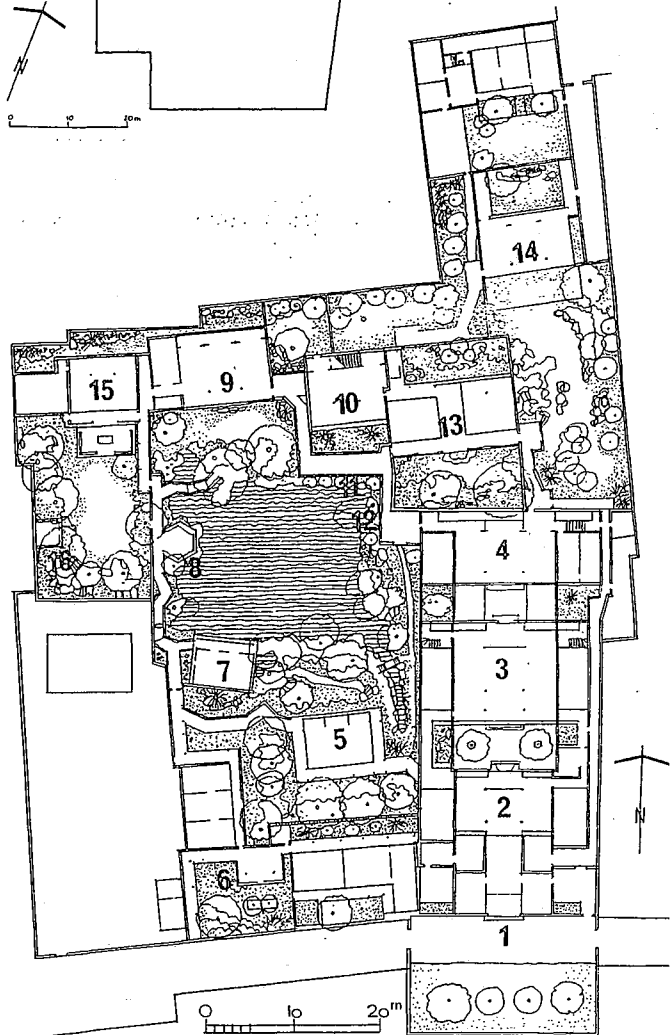
[72] Hu, Dong-chu. The Way of The Virtuous-The influence of art and philosophy on Chinese garden design. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press: 1991. 15.



**Fig. 31** Forest of Lions Garden, from Chinese Classical Gardens of Suzhou, page: 382 and Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 108.



**Fig. 32** Plan of Lingering-Here Garden, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 127.



**Fig. 33** Plan of The Retired Fisherman's Garden, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 114.

ratio between ground areas and water surfaces, along with the placement of the water bodies, the basic garden features can be defined immediately.

### 3. 1. 3. Contrast and Enhancement

Contrast is an artistic method used to improve two or more equal, but different objects. In the Suzhou gardens, this format is applied to a spatial composition, or to an elemental arrangement. This includes the concentration of objects versus their dispersion, openness and brightness versus enclosure and shade, rough rock formations opposing smooth ponds, and artificial buildings contrasting with natural landscapes.

Enhancement is a method that is used in the arrangement of scenic objects. This requires that both major and minor elements be enhanced mutually. Foil devices were employed frequently in Suzhou gardens. Three of these methods are explained as follows:

a). The use of buildings and white walls as backgrounds for flowers, trees and rocky peaks. (Fig. 34)

b). The placement of smooth, deep water bodies against rough, steep rocks.

c). The use of low, winding pond banks, simple bridges, and water-side pavilions that set off a broad water body.<sup>[73]</sup> (Fig. 35)

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[73] Liu, Dun-zhen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 17.



**Fig. 34** Entrance courtyard of Happy Garden, from Chinese Classical Gardens of Suzhou, page: 410.



**Fig. 35** Central part of The Retired Fisherman's Garden, from Chinese Classical Gardens of Suzhou, page: 394.



### 3. 1. 4. Variance and Balance

Variance opposes to symmetry in the arrangement of the Suzhou gardens, while balance demonstrates visual stability. Gardening elements may be placed to create variance.

A private garden in Suzhou, Chang Yuan (Carefree Garden), provides an example of the differences between variance and balance. Within this garden, buildings are grouped on the south, west and north, while they are connected by a long, winding, covered walkway on the east. A hexagonal pavilion is built in the midway of the covered walkway and a pond is situated centrally. On the southeast side of the pond, rock formations, consisting of irregularly shaped rocks, are piled at differing levels. Within this small garden, viewers are able to discern the balance of spatial relationships between buildings and scenic elements. (Fig. 36)

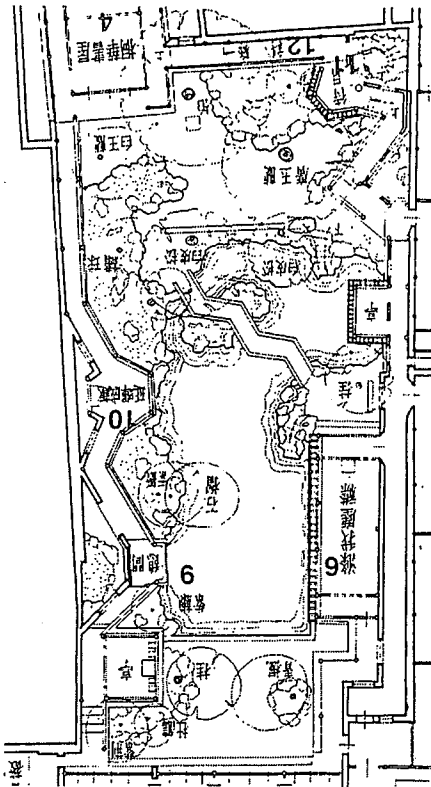


Fig. 36 Plan of Carefree Garden, from Chinese Classical Gardens of Suzhou, page: 446.

### 3. 1. 5. Scale and Distance

Scale denotes the relative spatial size of an object which differs with changing visual environments. Distance is an absolute measurement between viewing points and scenic objects. (Fig. 37)

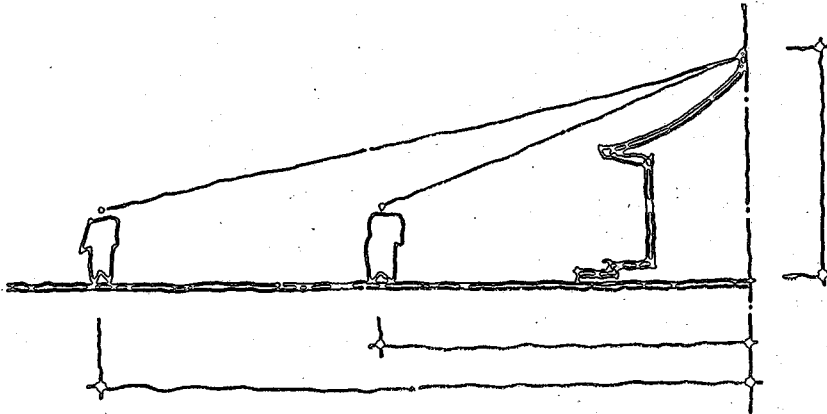


Fig. 37 Sketch of the relationship of scale and distance, by the author of this paper.

In a small spatial environment, the ratio between the size of scenic elements and the distance to viewing points becomes a key factor in the design of the Suzhou private gardens. Providing proper relationships among scenic objects and between scenic objects and their viewers enhances artistic effects. The ratio of distance to size must be adjusted according to the viewer's field of vision, whether or not the scenic areas are primary or secondary.

"In the classical gardens of Suzhou, the distance between an observation point and the scenic object to be observed generally is not great.

Though this is a natural consequence of the space limitation of these gardens, it also is partly due to the usual height of a rockery, the main scenic object in contraposition to the main hall, which ordinarily does

not exceed seven meters. If the distance between the rockery and the main hall is too great, the rocks would appear too small and insignificant. Therefore, the in-between distance was commonly set at between 12 and 35 meters. Also, lake-stone peaks should be observed from a short distance and therefore are usually placed in a small area. As a rule, when rocky peaks serve as the main scenic object of a garden, the observation distance is generally within 20 meters.” [74]

### 3. 1. 6. Building Orientation and "Borrowed" Scenery.

Most of the buildings in the Suzhou gardens face south or north, in order to receive maximum sunlight. The arrangement of single-spanned buildings between courtyards also facilitates ideal conditions of ventilation. (Fig. 38) Main halls are centers of activity for their inhabitants, so, the gardens enclosed within the residences are placed either in front of, or behind, the main halls or study rooms to provide outdoor scenery.[75] (Fig. 30)

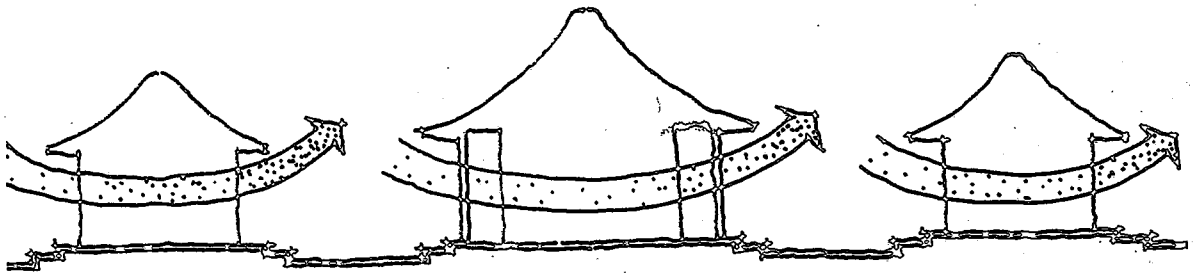


Fig. 38 Sketch of ventilative condition in courtyards of Suzhou gardens, by the author of this paper.

[74] Liu, Duen-zhen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 15.

[75] Liu, Duen-zhen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 11.

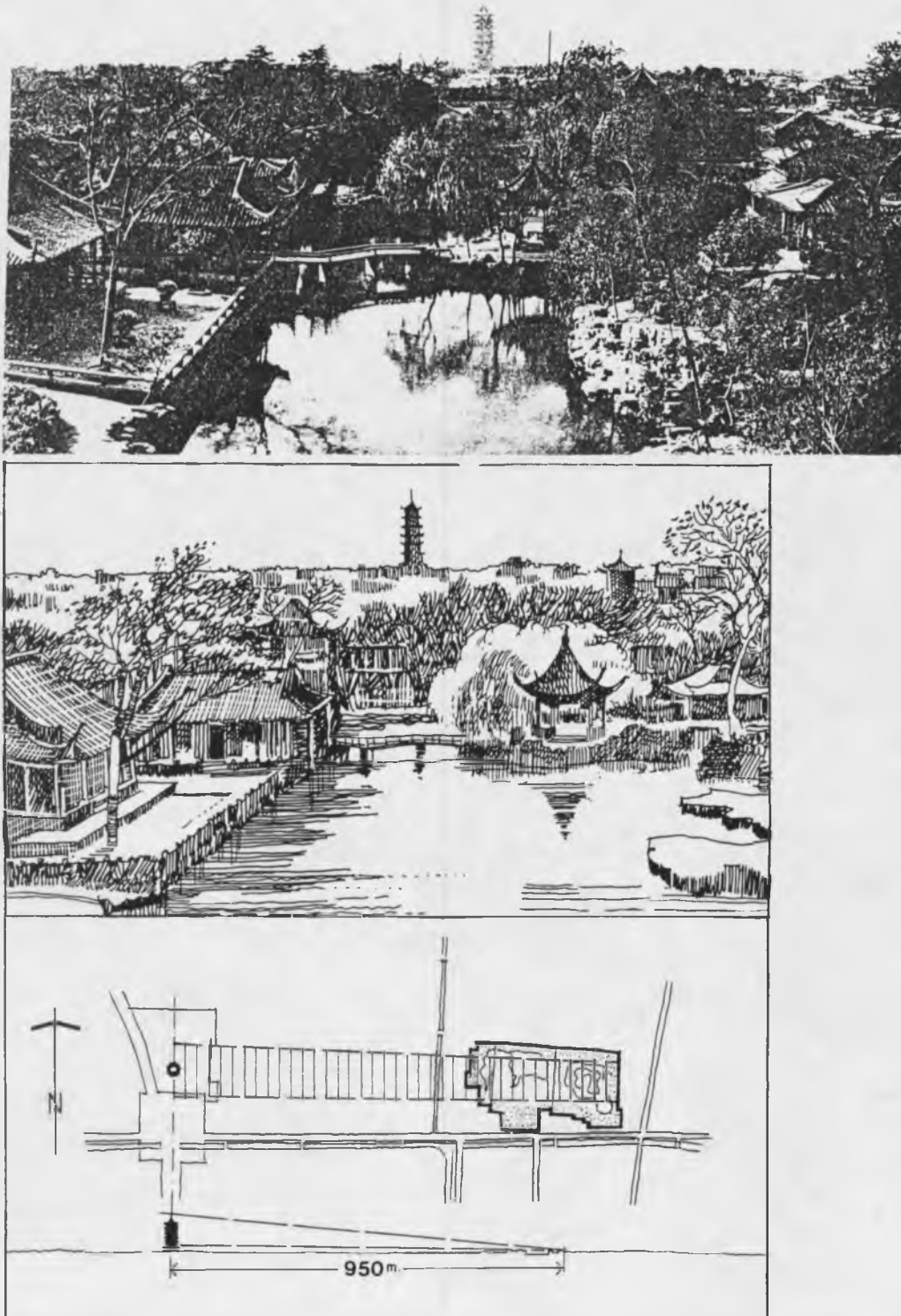
The utilization of existing scenery is one of the traditional devices used to enrich views in the Suzhou gardens. Skillful designing allows distant landscapes, which are beyond the limit of a garden, to be seen and enjoyed. For example, looking westward from Wuzhuyouju (Pavilion amid-Secluded-Wutong-and-Bamboo) in Zhuozhen Yuan (The Humble Administrator's Garden), viewers may appreciate the pleasant formation of Beisi Ta (North-Temple Pagoda) which is at a distance in the center of Suzhou City. (Fig. 39)

### 3. 2. WATER SURFACES

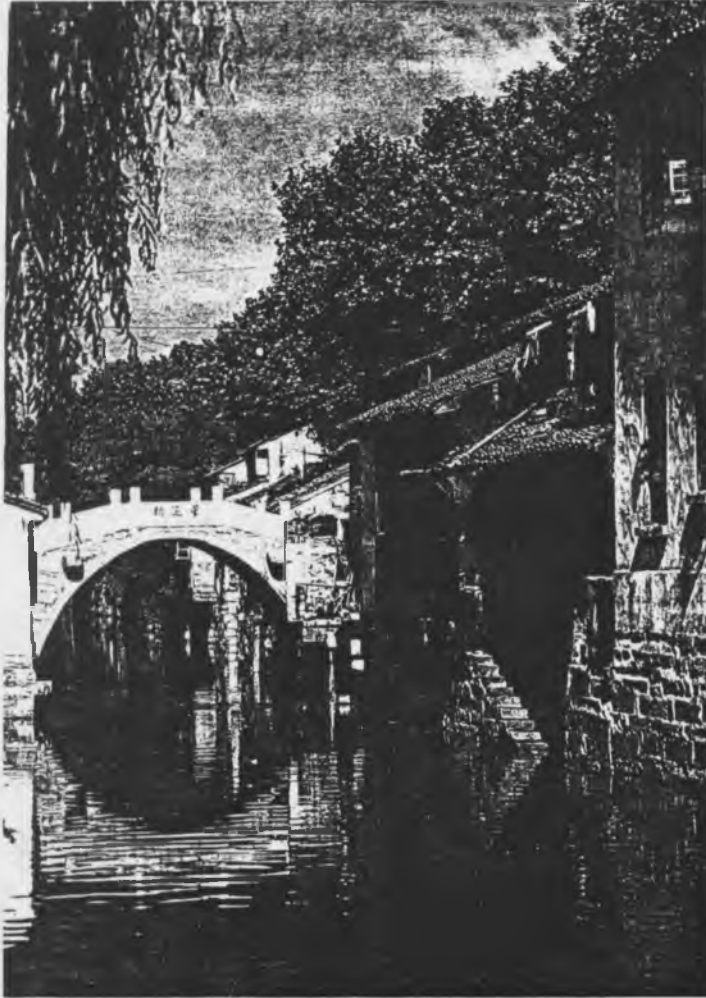
Suzhou is located on the plains south of the Yangtze River where there are numerous canals, lakes and a high level of underground water (Fig. 40). These convenient conditions made bodies of water important elements in Suzhou private gardens and help to enrich the scenic variance and visual effects.

Compared to buildings, rocks and plants, water bodies have movable, reflective, and transparent features. In small courtyards or scenic areas, water bodies can provide a sense of spatial openness when placed against a background of hills, groves of trees and buildings. (Fig. 41)

A body of water that expresses an emptiness or a void, creates, in the Suzhou gardens, the kind of atmosphere that Taoism describes as harmony of "being" (yu) and "non-being" (wu). Lao Tzu, an ancient Chinese philosopher and the founder of Taoism, stated that "being is the product of non-being". Chuang-tzu, another well-known Taoist said: "All things issue forth from non-being, for since being itself can not, by means of its own being, cause



**Fig. 39** Visual relationship between The Humble Administrator's Garden and the Beisi Pagoda, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 95 and Chinese Classical Gardens of Suzhou, page: 165.



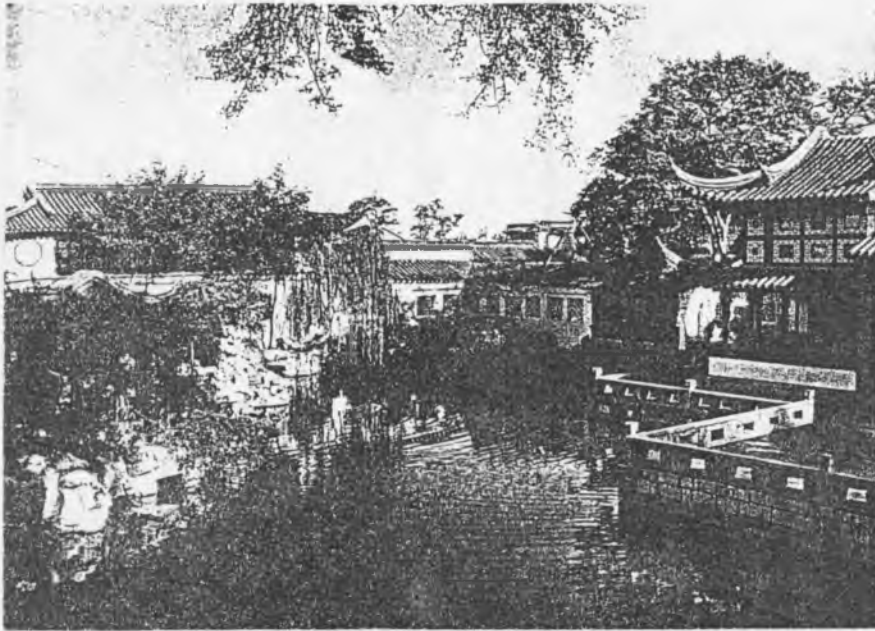
**Fig. 40** A water street in Suzhou, from Suzhou, page 102.

being, it must necessarily issue forth from non-being."<sup>[76]</sup> Some Western philosophers have suggested that, "What is highest and the origin of all things to the Chinese 'is nothing, emptiness, the altogether undetermined, the abstract universal, and this is called Tao, or reason.'" <sup>[77]</sup> Therefore, "Water reflecting the sun's rays can brighten up a courtyard garden. It can

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[76] Bodde, Derk. "Harmony and Conflict in Chinese Philosophy". Studies in Chinese Thought. Ed. Arthur F. Wright. Chicago, Illinois: The University of Chicago Press, 1953. 57.

[77] Chang, Chung-yuan. Tao: A New Way of Thinking-A translation of the Tao Te Ching with an introduction and commentaries. New York, Evanston, San Francisco, London: Harper Colophon Books, 1975. viii.



**Fig. 41** Central part of Linger-Here Garden, from *Chinese Classical Gardens of Suzhou*, page: 143.

highlight all manner of scenery, it can mirror clear days and white clouds, morning sunrises, evening sunsets, and all the changes of the seasons. The pond is 'empty', but it becomes 'filled' with the scenery bordering it, a characteristic of gardens centered around ponds".<sup>[78]</sup> In addition, the water also helps to adjust the temperature and humidity of the residential environment, purifying the air in the gardens, and watering the plants.

The manner in which the ponds are designed must also depend on the size, topography and style of the garden. A pond in a garden may be single and large, or divided into several small pools. It is important that the size ratio between ponds and gardens should be considered carefully. The purpose of correct placement of a pond is to create a variety of scenic areas and spatial effects.

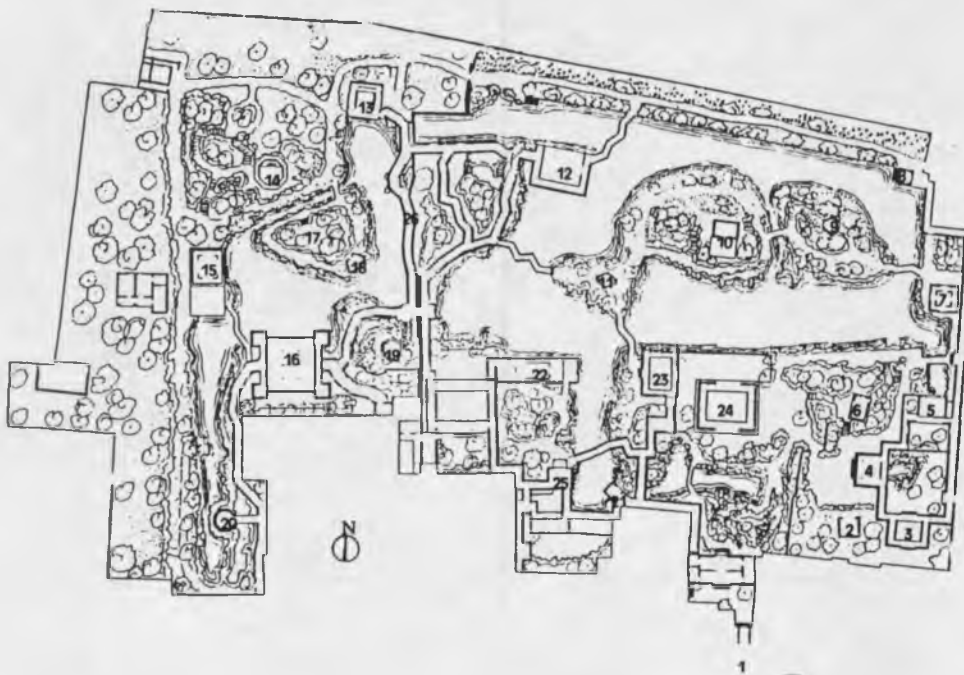
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[78] Hu, Dong-chu. *The Way of The Virtuous-The influence of art and philosophy on Chinese garden design*. Ed. Ying-hua Li. 1st ed. Beijing, China: New World Press, 1991. 41.

### 3. 2. 1. Water Bodies Design

#### a). Division and connection of scenic areas

In a large garden, there is a major difference between the planning of primary and secondary scenic areas. However, separate scenic areas must be connected visually and realistically. Ponds can be employed as an effective connecting mechanism. For example, in the Zhuozhen Yuan (The Humble Administrator's Garden), the main water area is broken into several parts by two hilly islets, and by buildings, winding bridges, and plants. Running water serves to connect these separate areas (Fig. 42).



**Fig. 42** Plan of The Humble Administrator's Garden, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 72.



### **b). Expansion of visual space**

The majority of the private gardens in Suzhou are small. Therefore, the addition of a pond can create visual openness within a limited spatial environment. Ponds are frequently grouped with other decorative elements. Their twisting banks create movement and give the impression of being separated. This encourages viewers to imagine concealed water sources behind the banks and rockeries, or between the buildings and foliage. This produces a sense of depth within scenery. The pond in Liu Yuan (Lingering-Here Garden) is a prominent example. (Fig. 41)

### **3. 2. 2. Water Surface Shapes**

Each Suzhou garden has its own, unique pond style. There are four basic pond types based on individual shape, size and depth. [79]

#### **a). Ribbon-shaped ponds**

A ribbon-shaped pond is narrow and curved like a ribbon. It is usually located within an open, flat area and used to set off rockeries. Much attention must be given to the curve of the banks and to the pattern of the water sources. This type of pond should not be enjoyed in one glance from any single viewing point. An example of this is seen in Huanxue Shanzhuang (Mountain Villa of Encircled Elegance). (Fig. 43)

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[79] Chen, Li-fang and Sian-lin Yu. The Garden Art of China. Portland, Oregon: Timber Press, 1986. 88.



**Fig. 43** Pond in Mountain  
Villa of Encircled Elegance



**Fig. 44** Ponds in Art Orchard,  
The Retired Fisherman's  
Gardens and Lingering-  
Here Garden.



**Fig. 45**

**Fig. 46** Pond in The Humble  
Administrator's Garden.  
(all drawings by author  
of this paper)

### **b). Square or circular ponds**

Square and circular ponds are the result of small water surfaces. Decorative waterside buildings and bridges could conceal the four corners of a pond creating feelings of spatial depth. The most enjoyable water scenery would be observed from these buildings and bridges. Wangshi Yuan (The Retired Fisherman's Garden), Yi Yuan (Art Orchard) and Liu Yuan (Lingering-Here Garden) are good examples of this type of landscaping. (Fig. 44)

### **c). Narrow ponds**

Most ponds in the Suzhou gardens are long and narrow. Even in a large, square body of water, elements such as islets and bridges are used, thus creating long and narrow bodies of water. This type of pond not only shows the scenery in depth sequentially, when seen from a vertical direction, but also helps to make the gardens appear remote and changing. At the farthest ends and at the narrowest parts, small crossing bridges are often placed to enhance the effect esthetically. (Fig. 45)

### **d). Grouped ponds**

In the larger Suzhou gardens, grouped ponds are used widely, and here the principle of division may be found. There are a variety of methods used to divide the surface of a pond, these depending upon the size and shape of the bodies of water. In a pond having a broad surface, islets and small bridges are often used for partitioning. Bridges can separate water areas, even garden spaces, into two or more parts, but they do not divide them completely. For

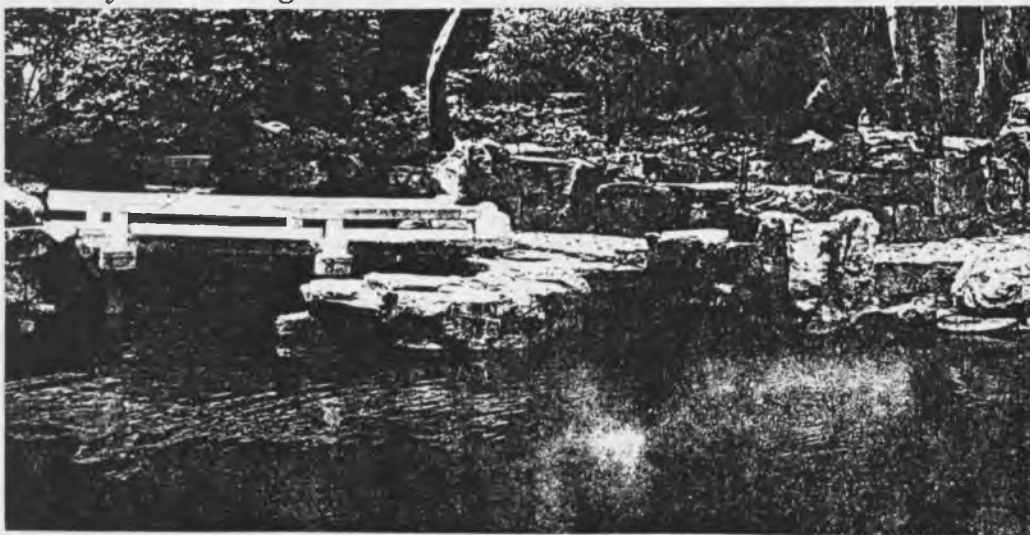
example, in Zhuozhen Yuan (The Humble Administrator's Garden), the main garden is actually a single body of water. However, in the center of this pond, bridges, dikes and islets join to form a large landscaped area, avoiding uninteresting scenery. Within this central scenic area, buildings, hills and trees are placed to decorate this group of ponds (Fig. 46).

### 3. 2. 3. Water Surface Treatment

#### a). Bridges

The use of bridges is a common device in a Suzhou private garden. Their function is to divide space and connect scenic areas, and, usually, they are vaulted over a pond at the most narrow part of the water surface.

Stone slab bridges are horizontally built and may have one or two twists. Their height, above the water level, will depend upon the size and topography of the pond. Over a small pond, bridges are built close to the same level as the water surface, giving viewers a deceptive impression of a wider pond than actually exists. (Fig. 47)



from Chinese Classical Gardens in Suzhou, page: 178.

Covered bridges provide sheltered walkways within the bridge, and are a special type of bridge in Suzhou gardens. Viewers may remain inside these protected paths above the water to enjoy the scenery, or they may move on to other interesting areas. Since these bridges are large, their height above the water level is more than that of a stone slab bridge. (Fig. 48)

#### **b). Waterside buildings**

Buildings built around a pond are called Xie (waterside pavilions) and Fang (land boats) in Suzhou gardens.

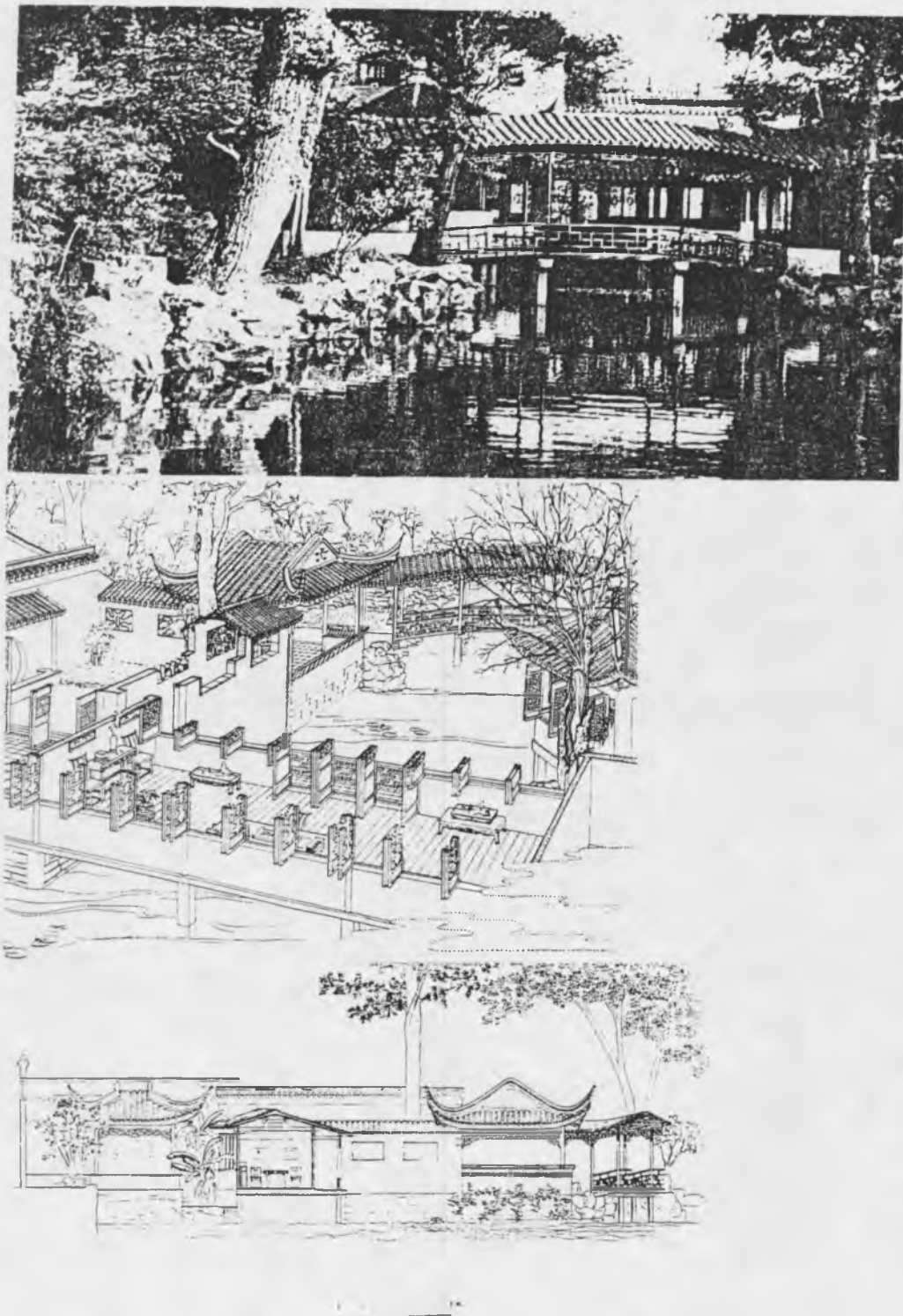
The foundation of a Xie is both under water and on shore, with a structure of stone pillars and beams above the water. For ideal scenery viewing, the front of a Xie that faces the pond is open, spacious and surrounded by railings. (Fig. 49)

A Fang, an imitation of an ancient Chinese boat, is built close to the edge of the pond. It faces the water on three sides and has a flat bridge on the fourth, linking the boat to the shore. (Fig. 50)

Shapes and sizes of waterside buildings should be considered carefully, so that they will harmonize with their surroundings. Their heights are low and their platforms, which stretch away from the buildings, must be close to the surface of water, avoiding a feeling of crowding in the pond space.

### **3. 3. ROCKERIES AND HILLOCKS**

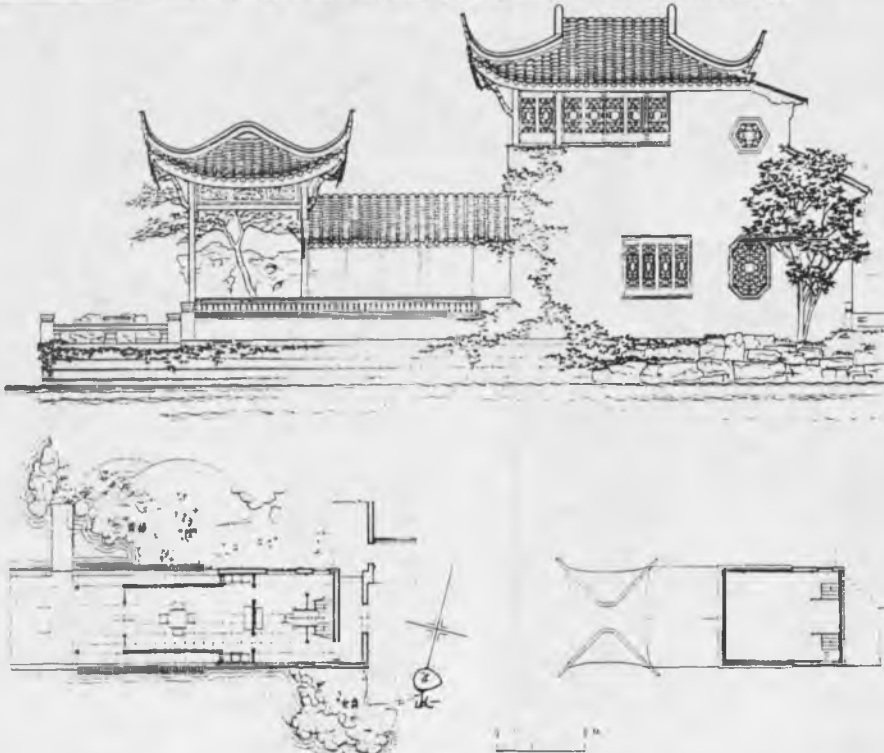
There are three purposes for building rockeries or hillocks, which are important gardening elements in the Suzhou gardens. The designers intent was to imitate natural landscapes inside an urban residential environment.



**Fig. 48** A covered bridge in The Humble Administrator's Garden, from Chinese Classical Gardens of Suzhou, page: 175 and 204.



**Fig. 49** A water pavilion in The Humble Administrator's Garden, from Chinese Classical Gardens of Suzhou, page: 228.



**Fig. 50** A landboat in The Humble Administrator's Garden, from Chinese Classical Gardens of Suzhou, page: 231.



Limestone (Taihu Rocks), coming from the Lake Tai area, is the major material for building the rockery. Ponds are often situated in gardens. Therefore, in order to utilize the earth excavated for a pond, a hillock is created. A rockery or a hillock functions as a composition that can cause a scenic climax. Whole garden spaces are divided naturally into several environments, thus creating a sense of infinity within a limited space. [80]

### 3. 3. 1. Construction within Surroundings

In very small courtyards, a few peaked rocks are placed as the major scenery. Customarily, these are erected behind, or in front of, the main residential buildings. (Fig. 51)



**Fig. 51** A courtyard in Forest of Lions Garden, from Chinese Classical Garden of Suzhou, page: 375.

In somewhat larger gardens, a pond is often positioned inside the courtyard serving as a visual center. In this situation, rocks are considered to

[80] Li, Yong-he. Cathay's Idea-Design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1988. 319 and 325.



be the foils either for the ponds, the buildings or the plants. (Fig. 52) In addition, rocks also can create a distinctive scenery in the corners of a garden. (Fig. 53)

In medium or large gardens, hillocks and ponds create several scenic areas, along with the buildings and foliage. At the top of a large hillock, pavilions may be built in order to provide viewers with a broader visionary field. (Fig. 54) When a hillock is built at the side of a pond which contains trees and flowers, pavilions and lounges are often placed at the opposite side of the pond, thus acting as a foil for the landscaping of the hillock. (Fig. 55)

Sizes and shapes of rockeries or hillocks must be in harmony with their surroundings. If they are too bulky, they will destroy spatial relationship in a garden.

### 3. 3. 2. Devices for Enhancement

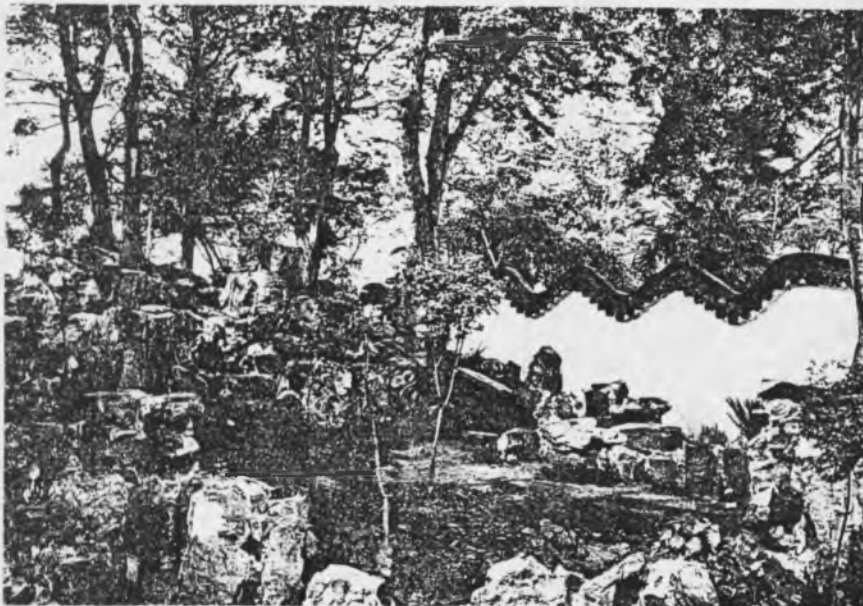
In Suzhou gardens, rocks are considered to be scenic objects as well as devices of contrast. Examples are high rockeries with flat water surfaces and bridges. When these are grouped appropriately, beautiful scenery can be observed.

When a rock is placed inside a courtyard, its primary, highest peak should be inclined slightly, resulting in an effective contrast with buildings and plants, such as is seen in Liu Yuan (Lingering-Here Garden). (Fig. 56)

If a pavilion or hall is placed at the top of a hillock, the relationship of their respective scales should be considered carefully. For instance, in Zhuozhen Yuan (The Humble Administrator's Garden), the hillock at the west of the central pond appears flat and low. The pavilion of



**Fig. 52** A rocky shore with building in Lingering-Here Garden, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 135.



**Fig. 53** A rocky corner in Lingering-Here Garden, from Chinese Classical Gardens of Suzhou, page: 187.



**Fig. 54** A pavilion built on the top of rock in Happy Garden, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 160.



**Fig. 55** A pond foiled by buildings and rocks in Lingering-Here Garden, from Chinese Classical Gardens of Suzhou, page: 353.

Xuexiangyunwei Ting (Pavilion of Fragrant-Snow-and-Colorful Clouds), built at the top of a hillock, is excessively dominant. If the hillock were more steep and high, and if the pavilion were built at a lower level, more favorable scenery would be provided. (Fig. 57)



**Fig. 56** A rock standing in a courtyard of Lingering-Here Garden, from The way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 46.



**Fig. 57** A hillock with a pavilion on it in the central part of The Humble Administrator's Garden, from Chinese Classical Gardens of Suzhou, page: 340.

### 3. 4. BUILDINGS

In a Suzhou private garden, buildings are more prevalent than they are in other types of Chinese gardens. As a result of distinctive climatic and cultural factors in the Suzhou area, buildings in Suzhou private gardens have features which vary with their surroundings.

#### 3. 4. 1. Main Types of Buildings

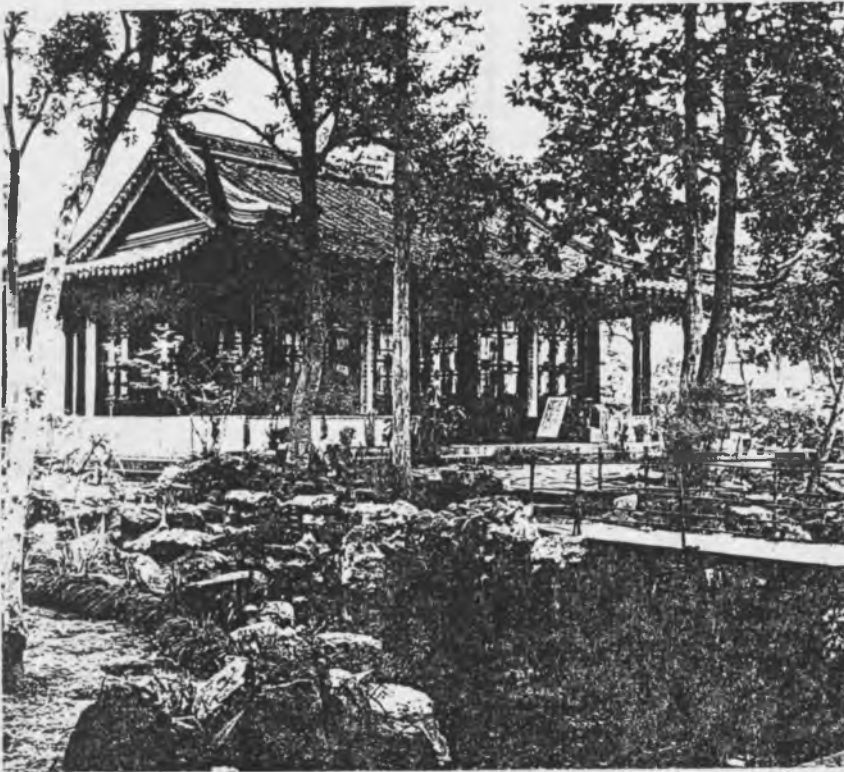
There are several building types in Suzhou private gardens. Among them, main halls are the most important buildings. The lounges and guest houses are of secondary importance, while other buildings are decorative. [81]

Halls were the main rooms in which garden owners performed various social and family activities. With openings on all four sides, halls were built within spacious surroundings and within the visibility of a variety of scenery. Halls are usually surrounded by verandahs under the eaves, so that it is possible to observe the scenery either by sitting inside the hall or by walking along the verandahs. This may be seen at Yuanxian Tang (Distant-Fragrance Hall) in Zhuozhen Yuan, (The Humble Administrator's Garden). (Fig. 58)

Lounges and guest houses are another type of hall, but they are placed in locations of secondary importance. They are buildings smaller than main halls and used for the observation and enjoyment of scenery, such as Zhuneiyizhi Xuan (A-Branch-from-Bamboo Lounge) in Wangshi Yuan (The Retired Fisherman's Garden). (Fig. 59)

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[81] Liu, Dun-zhen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 45.



**Fig. 58** A hall in  
The Humble  
Administrator's  
Garden, from  
Chinese Classical  
Gardens of Suzhou,  
page: 210.



**Fig. 59** A lounge  
in The Retired  
Fisherman's  
Garden, from  
The Way of the  
Virtuous-The  
influence of art  
and philosophy  
on Chinese  
garden design,  
page: 52.

Two and three story buildings and pavilions are located on the peripheries of gardens or by the sides of hills or ponds. If they are the major garden scenery, they are located prominently. Otherwise, they are placed in secluded or obscure areas and serve as secondary scenic objects, as seen at Yuancui Ge (Distant-Green Two-Storied Pavilion) in Liu Yuan (Lingering-Here Garden) (Fig. 60).

Pavilions, situated where viewers may rest and observe scenery, are also important buildings in Suzhou gardens. Pavilions are built in a variety of places depending on their forms and sizes. They may be built on top of a hill or beside a path or pond. There are half and whole shaped pavilions. A half-pavilion is built against a wall and linked with a covered walkway, while a whole pavilion can stand alone in almost any location. (Fig. 61).

Covered walkways serve as the arteries and veins of a garden. They link buildings together and provide viewing routes for viewers. They can also divide spaces and create feelings of depth in garden scenery. Plans for covered walkways are flexible. However, they usually wind around main buildings and other scenic objects. (Fig. 62) Covered walkways may have many forms. (Fig. 63)

### **3. 4. 2. Main Characteristics of Building Designs**

#### **a). Positioning of buildings and scenic areas**

Limited space, with a large amount of building construction in private gardens, make it essential to consider carefully the selection and positioning of main buildings.



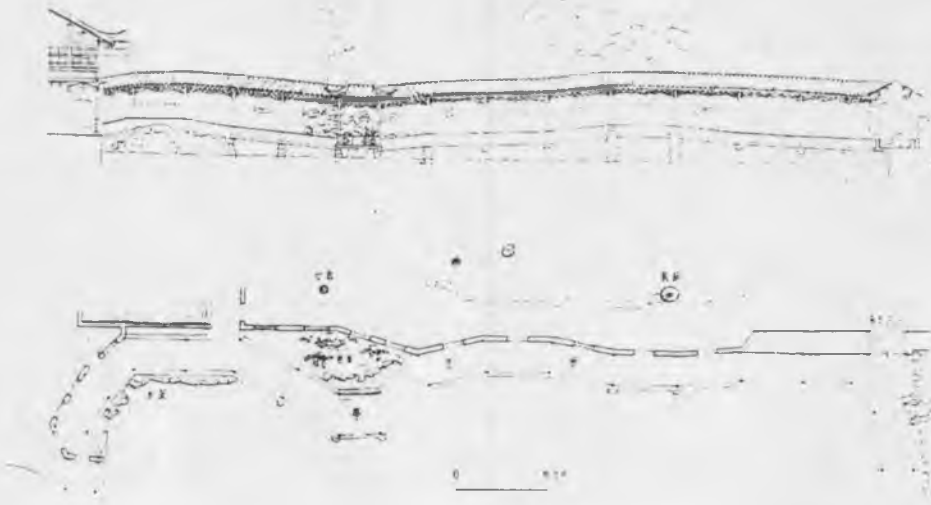
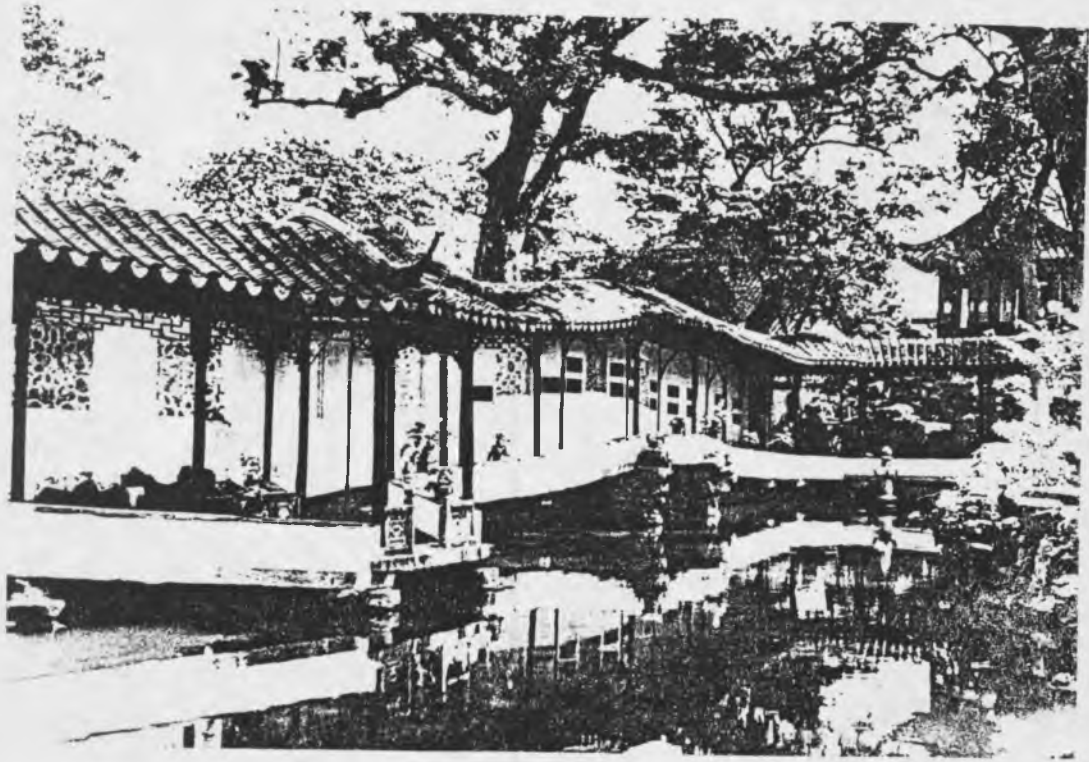


**Fig. 60** A two-storied pavilion in Linger-in-Garden, from Chinese Classical Gardens of Suzhou, page: 224.



**Fig. 61** A half-pavilion (left) in the Humble Administrator's Garden and a whole pavilion (right) in Surging-Wave-Pavilion Garden, from Chinese Classical Gardens of Suzhou, page: 239 and 242.





**Fig. 62** A waterside covered walkway in The Humble Administrator's Garden, from Chinese Classical Gardens of Suzhou, page: 258.

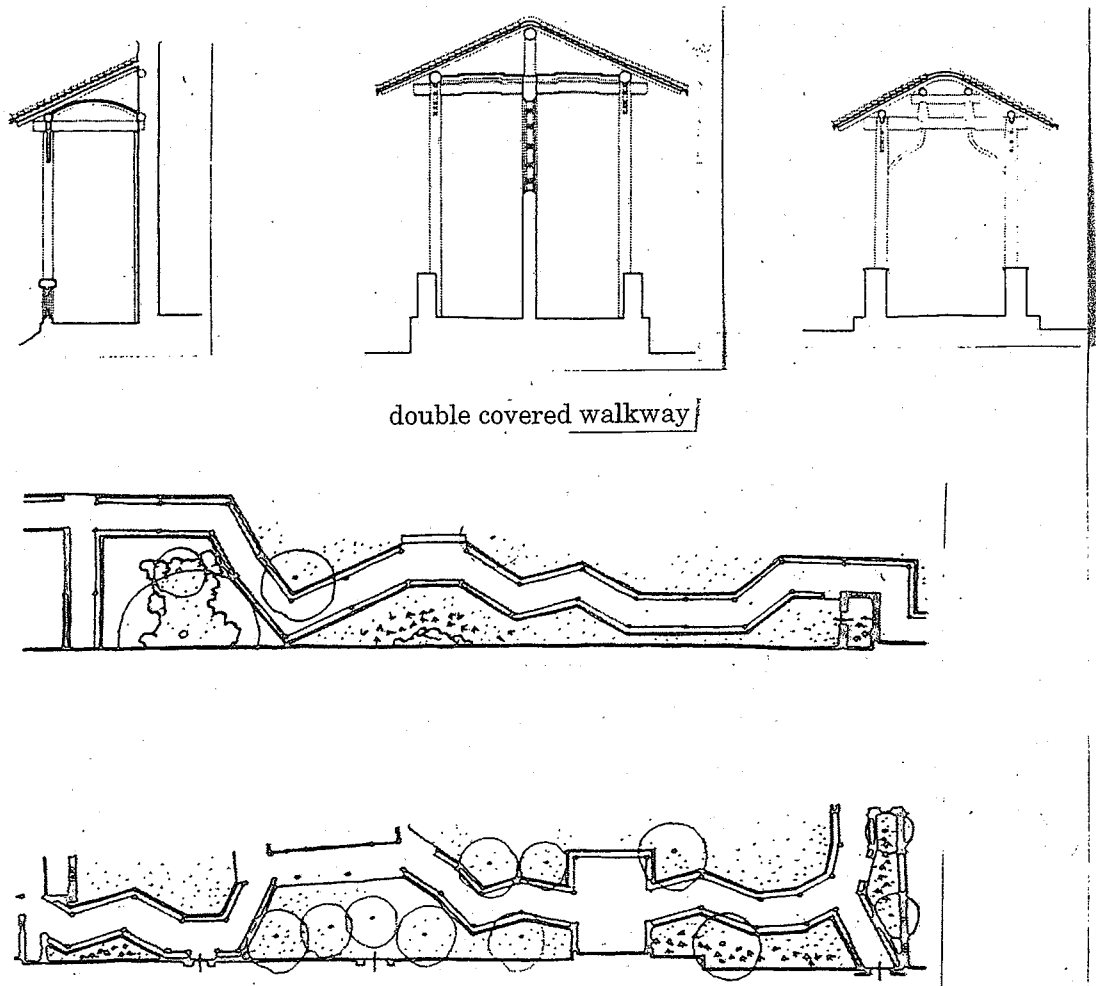


Fig. 63 Various covered walkways, from Chinese Classical Gardens of Suzhou, page: 255 and 256.

Most main buildings are placed at the corners and sides of small or middle-sized gardens. This allows ample room for viewing and enjoying scenery in the main, central areas. Example may be seen at Liu Yuan (Lingering-Here Garden). (Fig. 32)

However, in large gardens, major buildings occupy dominant visual positions creating several building groups and scenic areas. Examples of this planning are seen at Zhuozhen Yuan (The Humble Administrator's Garden). (Fig. 42)

#### b). Proper building density and spatial scales

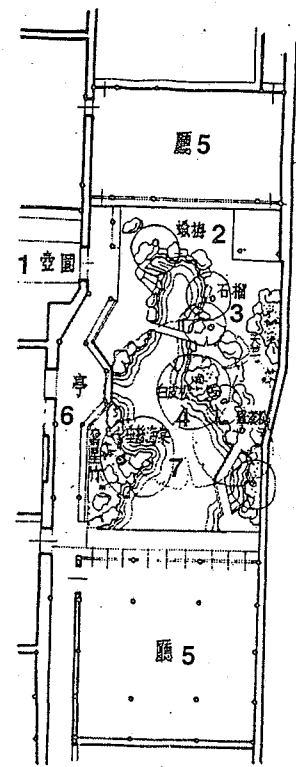
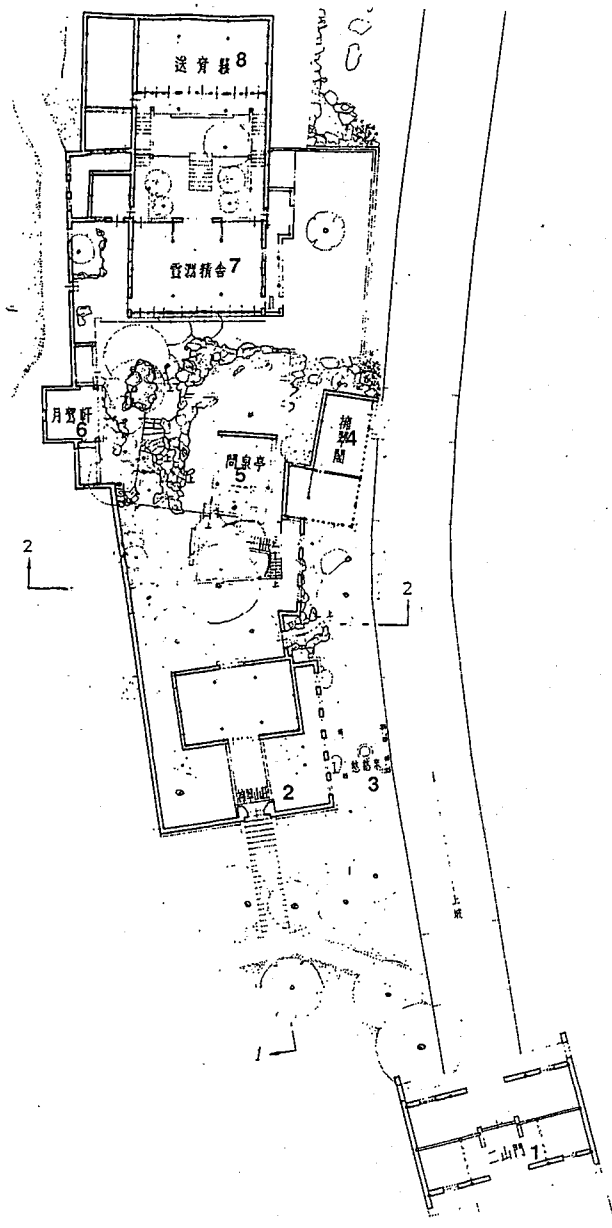
In a large Suzhou garden, the building density is about 15 percent of the entire garden area. This is found in Canglang Ting (The Surging-Wave-Pavilion Garden) (Fig. 33), Liu Yuan (Lingering-Here Garden) (Fig. 32) and Shizilin (The Forest of Lions Garden) (Fig. 31). However, in small and medium-sized gardens, the density may be as high as 30 percent, as seen in Hu Yuan (Kettle Garden) (Fig. 64), Chang Yuan (Carefree Garden) (Fig. 36), Yongcui Shanzhuang (Mountain Villa of Embracing Emerald) (Fig. 65).<sup>[82]</sup> Therefore, in the Suzhou gardens, buildings were seldom laid out in the same manner, meaning that percentages of building denseness varied, in order to provide ideal visibility.

Wangshi Yuan (The Retired Fisherman's Garden) is an example. Its garden, with an area of 3,600 sq. yards, is located to the west of the residences. Although it contains eight halls and lounges and three pavilions, correct building scale and an appropriate layout result in satisfying visibility. There are three important characteristics to be considered in the layout of this garden.

Firstly, all of the taller buildings were placed far against the northern and southern boundaries in order to position a water surface in the central part.

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[82] Feng, Zhong-ping. *Chinese Garden Architecture*. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 118.



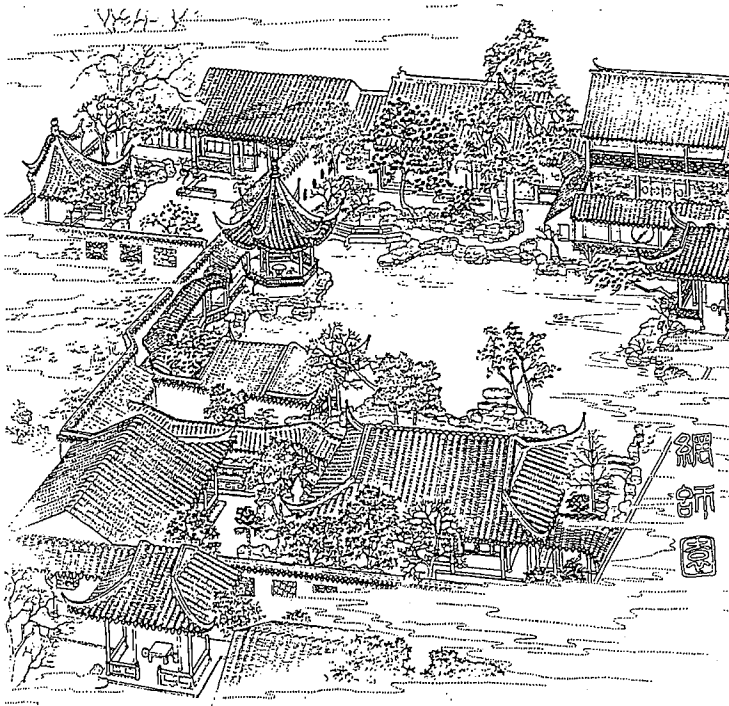
**Fig. 65** Plan of Kettle Garden, from Chinese Classical Gardens of Suzhou, page: 451.

**Fig. 64** Plan of Mountain Villa of Embracing Emerald, from Chinese Classical Gardens of Suzhou, page: 432.

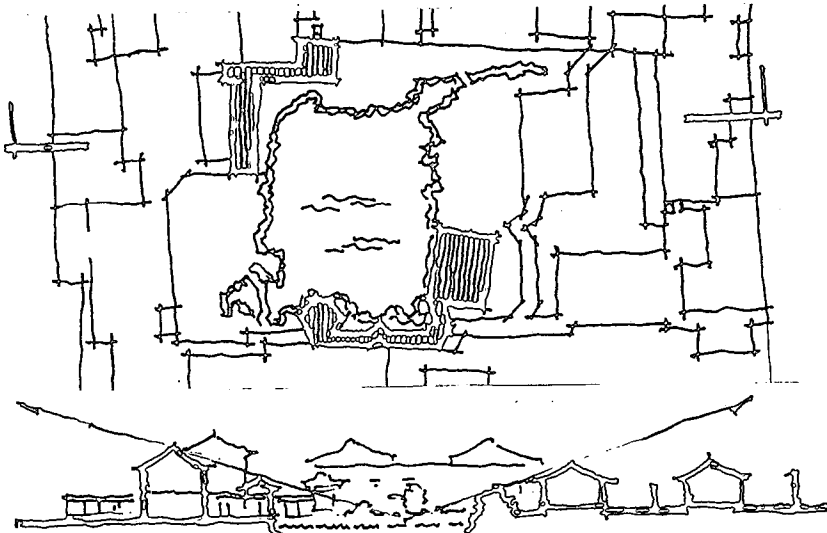
Secondly, buildings surrounding a pond are constructed on a smaller scale. They are covered walkways and waterside pavilions which are separated by rockeries and plants. These buildings become not only waterside scenic objects, but they also provide a transition between high and low, as well as dense and sparse, elements.

Finally, both the northwest and southeast corners of this garden remain vacant in order to contrast with the solidness of the buildings in the northeast and southwest corners. The imagined water sources are crossed by small bridges that are created to further expand the vision of the viewer.

(Fig. 66 and 35)



**Fig. 66** The central part of The Retired Fisherman's Garden, from Chinese Classical Gardens of Suzhou, page: 397 and by author of this paper.

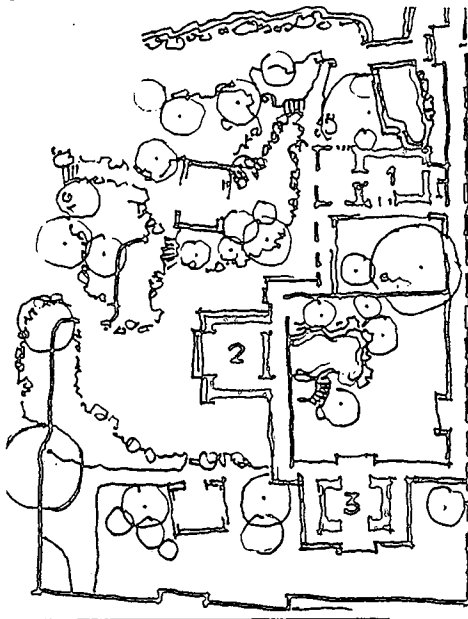


### c). Curvilinear building design and the Taoistic idea

The purpose of creating a Suzhou garden was to imitate the natural environment. So, influenced by the Chinese Taoistic concept which thought that linear, regular and geometrical shapes are not original features of nature, irregular, asymmetrical and undulate forms and styles became the main features of Suzhou garden buildings. [83]

To achieve a sense of spatial change, the layout of a garden building should be curved and elastic. Straight and symmetrical shapes must be avoided. Curved bridges, and covered walkways and routes, link a variety of scenic areas, and guide observers to unexpected views from one place to the next.

For instance, in Zhuozhen Yuan (The Humble Administrator's Garden), a courtyard group, composed of a variety of buildings at the southeast corner, is connected with winding, covered walkways and separated from outside gardens by curved walls and rockeries. (Fig. 67)



**Fig. 67** A courtyard group in The Humble Administrator's Garden, by author of this paper.

[83] Li, Yong-he. Cathay's Idea-design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1984. 306.

### 3. 4. 3. Main Styles of Building Ornamentation

In the Suzhou gardens, buildings are designed to appear light, delicate, small, and lively with forms that differ. There is a great difference between the style of these buildings with those in the gardens of north China. (Fig. 68)



**Fig. 68** A waterside pavilion in Beihai Park, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 110



**Fig. 69** roof tips of buildings in Suzhou gardens, from Chinese Classical Gardens of Suzhou, page: 265.

The roof is the most interesting part of artistic expression in Suzhou garden architecture. With its light wings, pointed corners and varied methods of construction, the roof constitutes one of the elements that exhibit the delicate and distinctive style of garden buildings in Suzhou. (Fig. 69)

The basic colors of Suzhou garden buildings are white, deep gray and brown. Walls are whitewashed with black-gray tile roofs and chestnut-brown pillars, and railings, as well as other ornaments (Fig. 70). The white walls are often used as a background for rockeries and plants. This produces various

effects of light and shadow as the sunlight reflects on the walls from different directions and at different times. (Fig. 34)



**Fig. 70** A building inn Linger-Here Garden, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, color plate: 4.51.

Another important feature of a Suzhou garden building is the decoration of the window frames, door frames and verandah pillars. These serve as a picture frame, through which viewers may enjoy the scenery. A wide variety of window and door frame types can be found on the buildings of a Suzhou private garden. (Fig. 71)

The basic elements which constitute a Suzhou garden are water, rocks and hills, foliage and buildings. However, the fact that these objects exist within a site framework does not guarantee an ideal garden design. With the passage of time, some elements in Suzhou gardens have developed their own design formulas. For instance, special building and rock styles and forms have





**Fig. 71** Various window and door frames in Suzhou gardens, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 96 and 97.

evolved as a result of local cultural and natural conditions. Designers have focused primarily on the type of layout which has the strongest influence on the general features of the garden. Surrounding, too, have created an impact on the formation of a Suzhou private garden.

# 空間

SPACE

# 變化

VARIATION



## CHAPTER FOUR:

### EXPLORATION OF SPATIAL DESIGN IN THE SUZHOU PRIVATE GARDENS

In Suzhou private gardens, once the placing of gardening objects have been determined, the organization of courtyard spaces and viewing routes may be the next emphasis of garden design. A variety of courtyard spaces in Suzhou gardens presents the changing visual environments, while proper viewing routes provide viewers the devices to fully enjoy these spaces.

#### 4. 1. ELEMENTARY SPATIAL FORMS

Space is essential to a human environment. Chinese traditional philosophy, Tao, has its distinctive thinks about a space.

“Lumps of clay are shaped into a vessel.

From their non-being arises the function of the vessel.

Doors and windows are constructed together to make a chamber.

From their non-being arises the function of the chamber.

Therefore, as individual beings, these things are useful material.

Constructed together in their non-being, they give rise to function.” [84]

“This statement suggests that the immaterial, that which is likely to be overlooked, is the most useful. Void, conventionally regarded as negative, actually is more important because it is always capable of being filled by

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[84] Chang, Chung-yuan. Tao: A New Way of Thinking-A translation of the Tao Te Ching with an introduction and commentaries. New York, Evanston, San Francisco, London: Harper Colophon Books, 1975. 35.

solid." [85]

Differing spatial shapes, series and contents create various visual effects. Both naturally or architecturally created space can have similar results. The Suzhou private gardens have unique environments and functions. Therefore, spatial design and organization are significant aspects of the Suzhou gardens. "The total area of each garden usually is small, so it is necessary to create a number of separate environments within the limited space, or to insert transitional scenic areas between buildings to bring change and variety to the garden scenery." [86]

A Suzhou private garden is usually thought to be the outdoor environment which is composed of mainly several different courtyards for a group of residences. Because of structural and material restrictions, the indoor spaces of classical Chinese architecture are relatively small and they can not contain a larger indoor area.[87] So, spatial organizations, and variances are always implemented by the combination of architectural indoor and outdoor spaces in Suzhou garden.

The design of a garden space should focus on the enjoyment of scenery. But, the Suzhou gardens are located in urban centers and no beautiful landscapes can be enjoyed beyond their boundaries. Considering these environmental conditions, their spatial layout and design are intended to create an introspective, quiet atmosphere. High walls eradicate the noise and bustle of the city. An analysis of Suzhou gardens demonstrates that openness,

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[85] Chang, Amos Ih Tiao. The Tao of Architecture. Princeton, New Jersey: Princeton University Press, 1981. 7.

[86] Liu, Dun-zhen. Chinese Classic Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Buildin Industry Press, 1993. 48.

[87] Li, Yong-he. Cathay's Idea-Design theory of Chinese classical architecture. 2nd ed. Hong Kong: Wideangle Press, 1984. 132.

closure and their joining are the basic methods of spatial treatment within the garden's boundaries. In a Suzhou private garden, the composition of outdoor spaces mainly utilize buildings, walls, rocks, water surfaces and plants. According to their size and style, these outdoor spaces can be classified as a small yard, courtyard or compound and garden.[88]

#### 4. 1. 1. Small yards

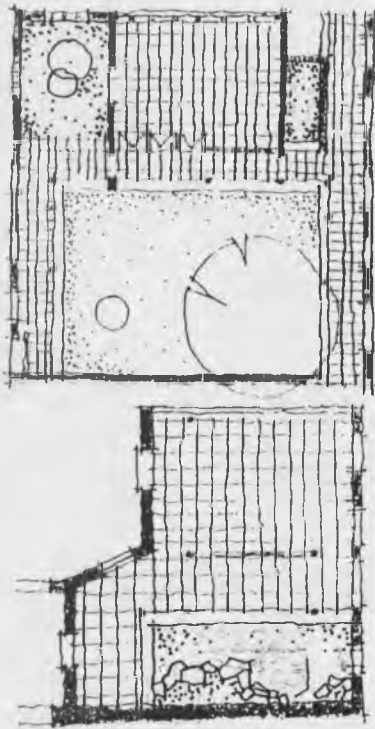
A small yard should measure less than the height of the adjoining building so that it can provide natural light and ventilation. Small yards, located near an existing structure, can create a feeling of visual openness in non-utilized areas. Artistic expression of unused space may be enhanced when rocks and plants are placed against a background of white. (Fig. 72 and 73)

#### 4. 1. 2. Courtyards

Courtyards are located in front of, or behind, the main dwellings, which can form regular or irregular patterns with secondary buildings. A courtyard measures the same as, or somewhat larger than, the height of the adjoining buildings. In addition to their proximity to the central structures, courtyards may be surrounded by secondary buildings, walls, or covered walkways. Trees, flowers and rocks are placed within the courtyard which are enjoyed by viewing outside scenery from within the main structures.

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[88] Liu, Dun-zhen. Chinese Classical Gardens of Suzhou. Ed. Joseph C. Wang. Trans. Lixian Chen. Beijing, China: China Building Industry Press, 1993. 48.  
Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 155.



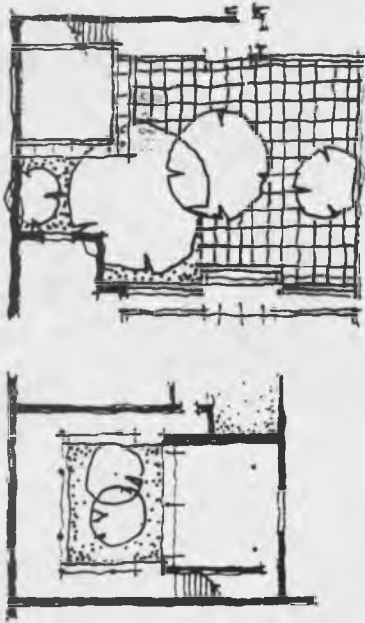
**Fig. 72** Small yards in Suzhou gardens, after Chinese Garden Architecture, page: 156.



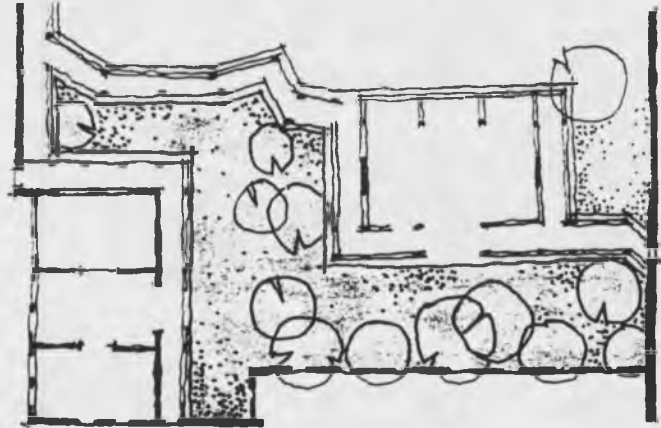
**Fig. 73** A small yard with rocks and plants in Linger-Here Garden, from Chinese Classical Gardens of Suzhou, page: 311.

Courtyard spaces can be designed with either a closed or an open style. A closed courtyard can create a quiet and separate spatial environment. For example, in The Restored-to-Me Study in Liu Yuan (Linger-Here Garden) and in The Two-Storied Library of Ou Yuan (Twin Garden) (Fig. 74), the courtyards are separated by buildings, covered walkways and white walls, all of which created a calm spatial environment within the garden.

An open courtyard may be surrounded by covered walkways or with large windows and doors within them that connect external surroundings to internal structures. Therefore, internal and external spaces are exchangeable and can be enjoyed from both within doors and out-of-doors. (Fig. 75)



**Fig. 74** Two closed courtyards in Twin Garden and Linger-Here garden, after Chinese Classical Gardens of Suzhou, page: 201.



**Fig. 75** An open courtyard in The Retired Fisherman's Garden, after Chinese Garden Architecture, page: 158.

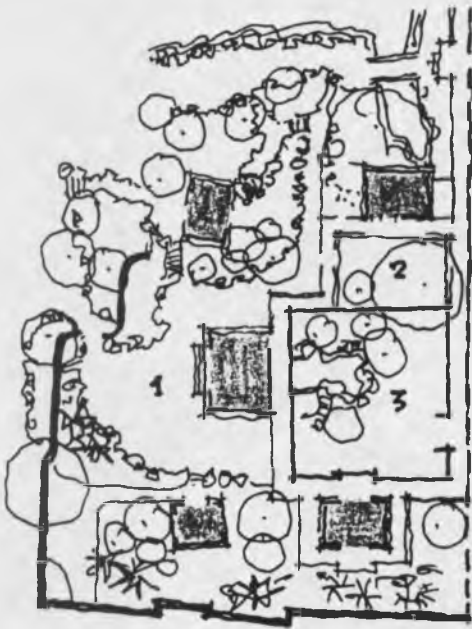
#### 4. 1. 3. Compounds

A compound combines the qualities of a courtyard with a small garden environment, and is larger than a courtyard. Surrounded by covered walkways, walls, and other buildings, its design is flexible. Rocks, plants, ponds and small buildings are utilized to create multi-layered spaces. Small spaces may be separated from main areas in order to achieve contrasting or opposing scenery. (Fig. 30)

#### 4. 1. 4. Gardens

A garden, which may include ponds surrounded by buildings, rocks and plants, is a further extension of the compound. Open spaces, flexible layouts and a variety of spatial layers are its major characteristics. Basically, it is a small natural environment created by artificial devices. Examples can be

found by viewing a private garden or small gardens built inside a larger garden. A large garden is composed frequently of several small courtyards, each of which has an individual theme, and a major courtyard may be surrounded by several minor courtyards. When gardens and landscaped areas are versatile, a variety of emotions can be produced. (Fig. 76 and 32))



**Fig. 76** A group courtyard in The Humble Administrator's Garden, after Chinese Garden Architecture, page: 159.

#### 4. 2. THE ORGANIZATION OF COURTYARDS

Few Suzhou gardens are composed of a single courtyard. They include several courtyards of different sizes and shapes. "Garden dimensions are relative, not absolute. Without 'large' there is no 'small', and vice versa. The more sparsely a garden is laid out, the more spacious it feels and the more changes there are, thus creating a sense of boundless space within a limited area." [89]

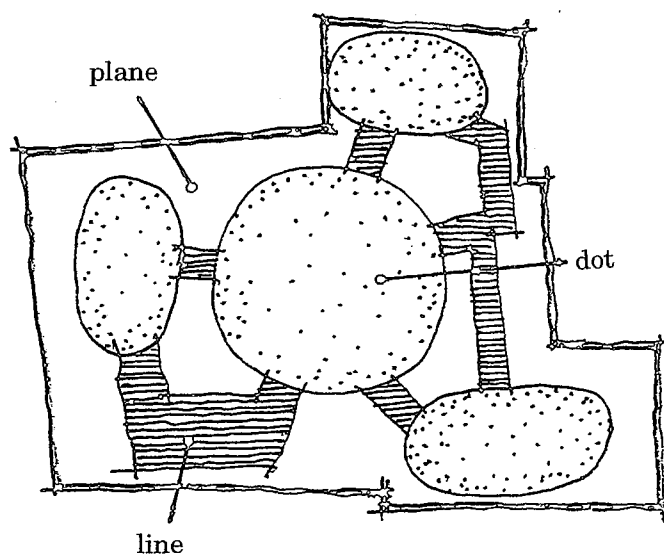
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[89] Chen, Cong-zhou. On Chinese Gardens. 1st ed. Shanghai, China: Tongji University Press, 1984. 6.



To view the entire garden area at one time is not desirable for a Suzhou garden. When studying initial plans, or observing existing gardens, numerous skills of design may be seen. A Suzhou private garden is planned by the designers to create spatial and scenic variance within a limited site. This stimulates the viewers' interest and they may be encouraged to explore the scenery further.

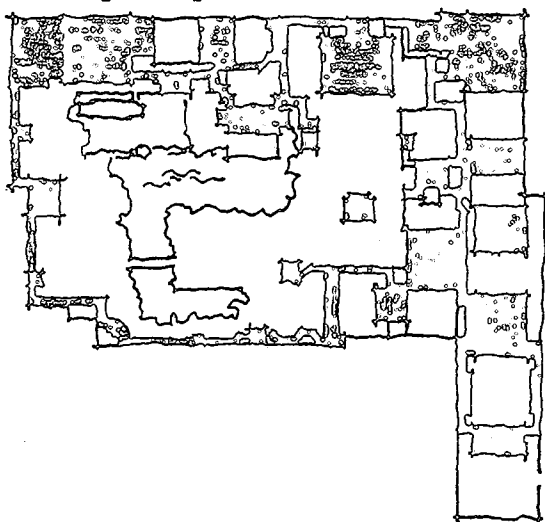
Methods of organizing scenic areas of a Suzhou garden are variances between large and small, active and stable, open and closed. The plan of a Suzhou garden is, in essence, an integral plane. Several courtyard spaces can be thought of as dots which are connected with lines - winding, covered walkways, paths and buildings. Therefore, a whole garden is composed of these "dots", "lines" and "planes" (Fig. 77). For most private gardens, no specific manner can be used to organize or design courtyards. However, covered walkways, paths and other structures form the skeleton of a private garden, and differing landscaped areas serve as the body. Spatial organization may be categorized in the following styles.



**Fig. 77** A sketch about layout of a Suzhou garden, by author of this paper.

#### 4. 2. 1. The centralized and introspective style

A centralized, introspective design is usually applied to small and middle-sized gardens. There always is a larger, major scenic area in each Suzhou private garden, so that a natural environment can be created. Therefore, consideration must be given to the placing of buildings because they will cover large areas in relatively small sites. For instance, in Shizilin (Forest of Lions Garden), in order to maintain space and focus attention on the central landscape of rocks, all the buildings and covered walkways have been situated close to the boundaries of the garden. A centralized, but irregular, pond is included to create feelings of spaciousness. The designers avoided total and immediate visual gratification by placing several large rocks of differing heights and shapes on the banks of the pond. The buildings, serving as a background for these scenes, contrast with the natural landscape. Viewers may stand near water, or climb a rock formation. Scenery and moods, within a specific space, are altered when viewing points change. Around this main area, small, enclosed courtyards have been arranged at corners. These courtyards are separate from the main space and provide other quiet spatial environments. (Fig. 31 and 78)



**Fig. 78** A sketch of building layout in Forest of Lions Garden, by author of this paper.

This form of spatial structure produces feelings of stability and inner serenity.

#### 4. 2. 2. The decentralized and extrospective style

Decentralized and extrospective designs are often applied to large private gardens. Decentralization indicates that buildings and other scenic objects, which help to ornament and separate, are planned freely and openly. Therefore, there must be unity between the architectural style and the natural scenery. These architectural styles can vary with diverse surroundings. Usually, these styles are created by open designs, and enhance the scenic areas of which they are a part. Buildings are aesthetically grouped and move toward the natural landscape of the garden. This causes the merging of several scenic areas in a dynamic and harmonious manner.

The Zhuozhen Yuan (The Humble Administrator's Garden), a larger garden in Suzhou, is an example. Its garden and residence cover 9.88 acres, while one third of this area is the garden. Most of the residential and garden buildings are placed on the south side of the site, leaving the north side open. A pond occupies most of this garden. Hillocks are placed inside the pond and serve to provide heights and to divide spaces. Using this basic layout, it is not necessary to place buildings in a group. The buildings were constructed on the top of hillocks, beside the banks of ponds, behind corners, or in full view. Between them, there are winding, covered walkways, groves of trees, and rocks that connect the surroundings, by creating an united style. The buildings in a decentralized area are relatively small in scale, although they are of the same size with that in centralized areas. There is no feeling of

constraint with this type of planning. On the south side of the main area, several small courtyards are placed. These courtyards are not enclosed, so viewers may not only enjoy their quietness, but they may have the feeling of viewing much larger outside space. (Fig. 42 and 79)

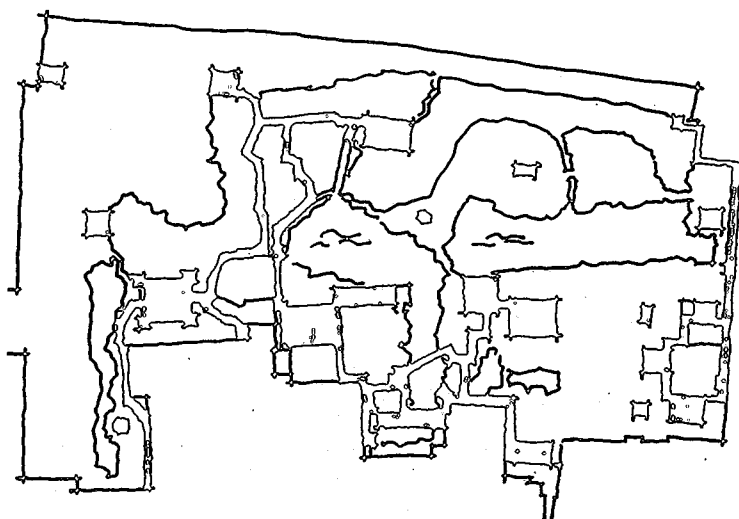


Fig. 79 A sketch of building layout in the Humble Administrator's Garden, by author of this paper.

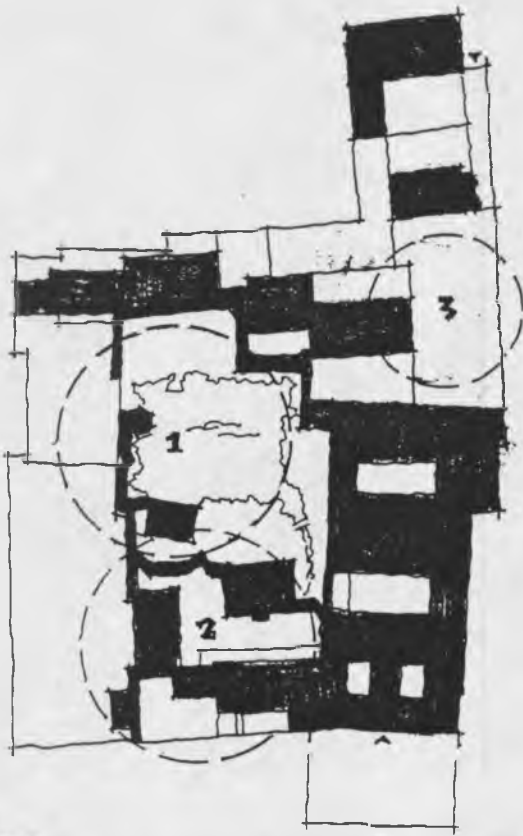
#### 4. 2. 3. The combined style

A combined design is suitable for gardens of a medium size. Because an open or large single area is not intended, the main feature of this kind of garden is the composition of several courtyards. Although there is a main space, secondary spaces are closed and independent on their own surroundings and scenery.

For example, in Wangshi Yuan (The Retired Fisherman's Garden), the residential buildings have been merged into the whole site, (Fig. 33) which differs from Shizilin (Forest of Lions Garden) (Fig. 78) or Zhuozhen yuan (The Humble Administrator's Garden) (Fig. 79). Several buildings are divided into three groups by their courtyards. The first group is located in the center, and

is composed of several major buildings, flowers, trees, and rocks. Within the largest area, small buildings around a central pond form the major scenery of this garden (Fig. 80, No. 1). On the south, is another small enclosed courtyard, composed of Xiao-Shan-Chong-Guei Xuan (Little-Hillock-and-Laurel-Grove Hall) and residential buildings, which provide a quiet gathering place and an enjoyable environment for residents and guests (No. 2). Finally, at the northeast corner, there is another small courtyard which is completely separated from the other courtyards. This is the first open outdoor area to be seen when entering from the rear gate, but it is also a transitional spot between high buildings, Five-Peak Study and Paintings Gallery, and adjacent buildings. (No. 3)

Wangshi Yuan (The Retired Fisherman's Garden) is an unique example of Suzhou gardens. The central water surface, surrounded by halls, pavilions and covered walkways, is the essence of this garden. Numerous buildings and scenes are composed in an orderly manner, so, the garden is varied but uncluttered within a relatively small space. A about 480 sq. yard pond, which looks like a mirror, enhances the spatial effect. This not only gives the effect of spatial expanse, but connects and harmonizes different scenic elements within a small site (Fig. 81). Viewers can enjoy intrinsic serenity from wherever they may stand. Two other small, enclosed courtyards have rock formations that serve as their major scenery and help to create a feeling of peace. Whitewashed walls are the perfect background for the rocks. Through ornamental openings in the walls, viewers can enjoy the exterior scenery (Fig. 82 and 83). Therefore, in a combined garden, different spatial environments can create completely different feelings for the viewers.



**Fig. 80** A sketch of building layout in The Retired Fisherman's Garden, by author of this paper.



**Fig. 81** The central pond space in The Retired Fisherman's Garden, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 40.



**Fig. 82** A corner of a courtyard in The Retired Fisherman's Garden, from Chinese Classical Gardens of Suzhou, page: 401.



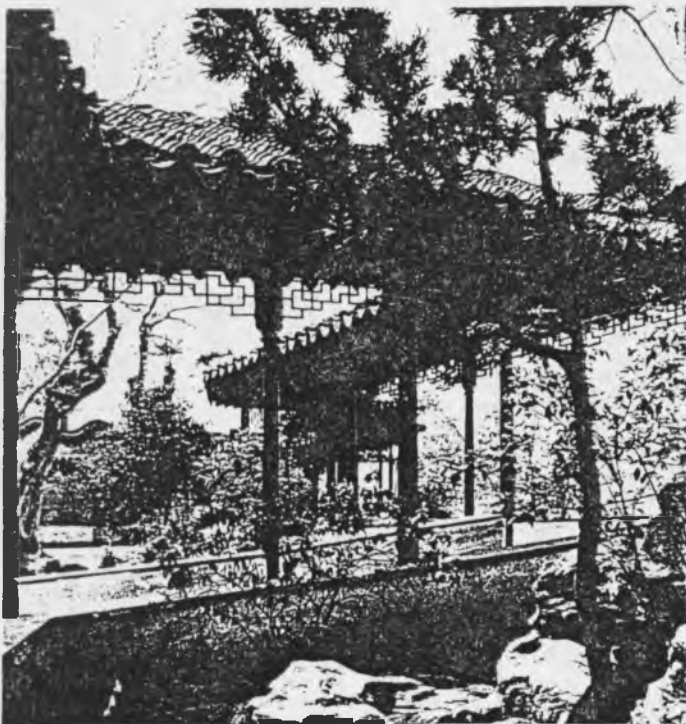
**Fig. 83** Another courtyard in The Retired Fisherman's Garden, from Chinese Classical Gardens of Suzhou, page: 402.

### 4. 3. THE ORGANIZATION OF MOVEMENT

Another important feature of the Suzhou garden is the organization of viewing points which has made the garden's scenery and spaces more rich and attractive. Because of differing designs, the organization of movement can be divided into dynamical and statical manners.

#### 4. 3. 1. Dynamic space

Long covered walkways which wind around courtyards and buildings are the distinguishing feature of the Suzhou gardens. They provide viewers with open shelters, and help to guide them from one scenic point to another. Various places joined by long covered walkways have diverse scenery. These covered walkways are constructed close to high walls or they may be inserted into open areas that have changing elevations (Fig. 62 and 84). In order to



**Fig. 84** A winder covered walkway in Lingerin-Here Garden, from Chinese Classical Gardens of Suzhou, page: 259.



avoid monotony, small, but scenically interesting views are located between covered walkways, walls and buildings. Plants and rocks are often put into these small spots in order to form independent scenes. They not only contrast with open spaces, but they create a greater sense of depth. (Fig. 73)

A long covered walkway in the largest scenic area of Liu Yuan (Lingering-Here Garden) is an obvious example of this contrast. This covered walkway, more than 300 feet long, borders the main scenic area on the west and the north. This covered walkway is designed to be an important scenic object as well as a comfortable shelter along a scenic route. Its elevation changes between flat places and hills, so that people can enjoy views from both near and far. This plan does not require a straight pattern; a winding, varied one is preferable. Several irregular, small yards are placed between covered walkways and walls. Dim light and simple scenes serve as a foil for the central area. When strolling along this covered walkway, viewers feel continuous spatial changes and see differing artistic environments. (Fig. 85)

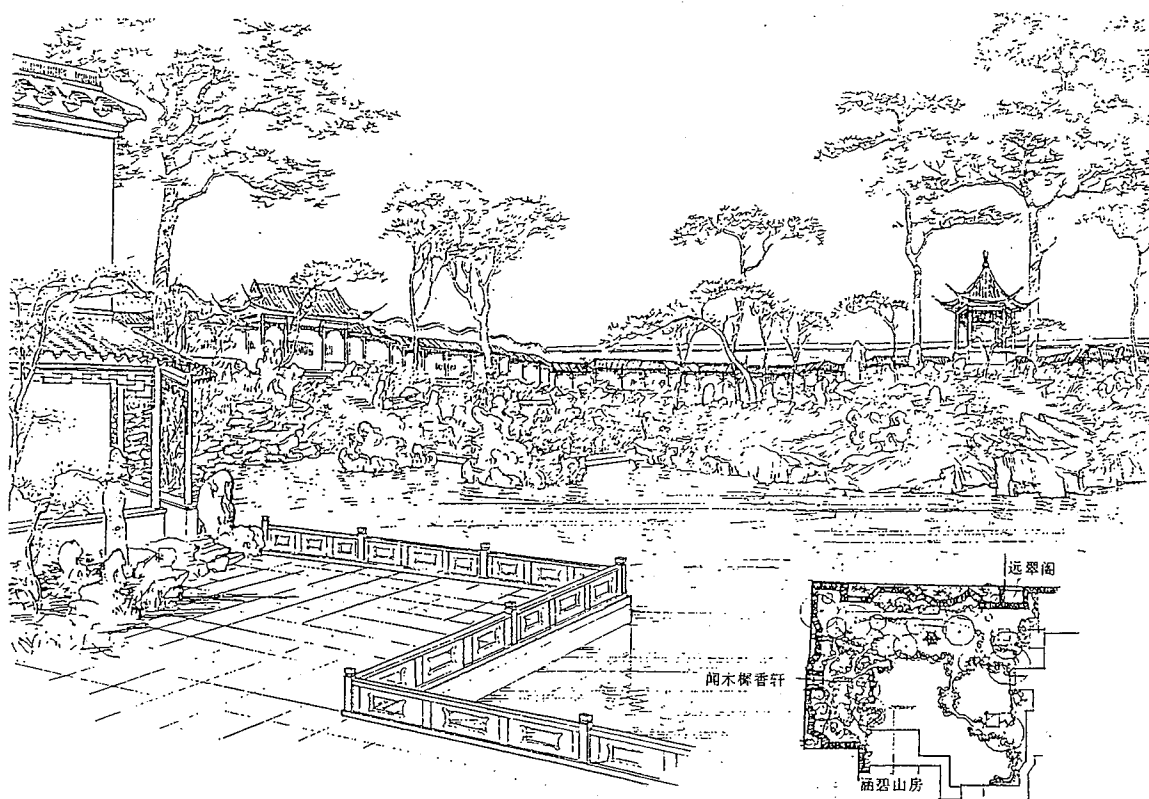
#### 4. 3. 2. Static space

Static, spatial organization is applied mainly to small courtyards. In the Suzhou garden, small courtyard spaces need to be planned carefully.

"Generally, ..... the smaller spaces formed clusters of individual garden spaces in which light, shade, color and texture were used to create a perfect setting for the display of plants, specimen flowers and sculptured rockery".<sup>[90]</sup> These quiet places surrounded by buildings and walls are planned around a

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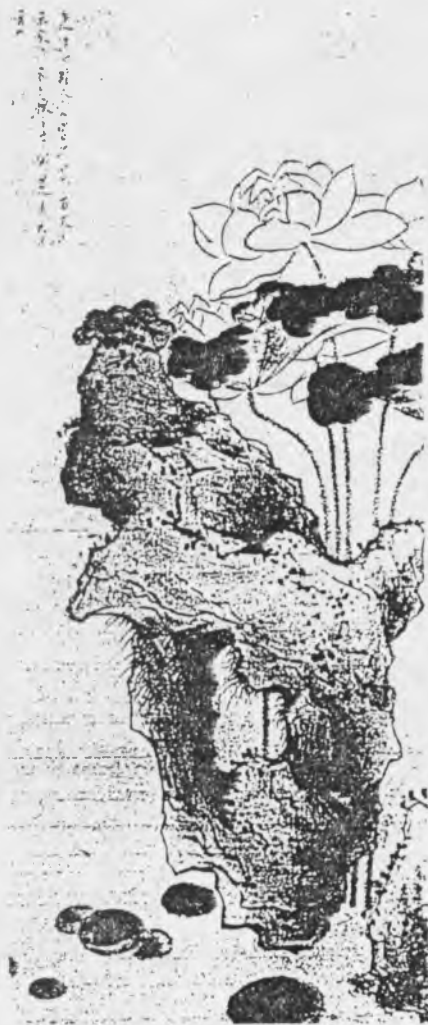
[90] Johnston, R. Stewart. Scholar Gardens of China - A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 80.



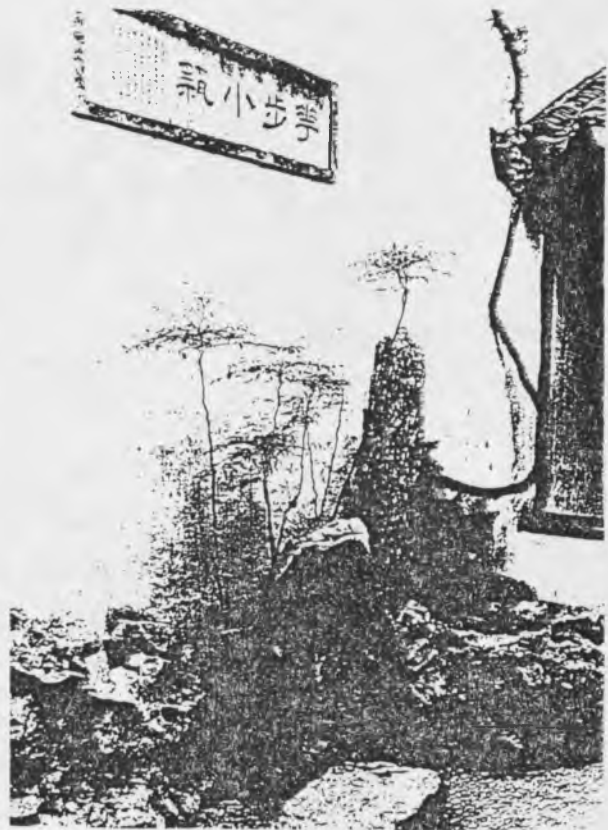
**Fig. 85** The central space surrounded by long covered walkways,  
from *Chinese Garden Architecture*, page: 219.

major area. Inside them, scenic objects are simple and small, with points of observation remaining static. Here, abstract shapes and clean-cut outlines are used for scenic arrangement. At one corner, or on one side of a courtyard, attractive scenes are set with whitewashed walls serving as a background. The whitewashed walls, giving the appearance like a clear space on a Chinese traditional painting, create an illusion of fading. (Fig. 86 and 87) Wall openings of differing shapes and sizes also enrich the spatial depth.

Further study of the courtyard grouping at "Small House in the Stone Forest" in Liu Yuan (Lingering-Here Garden) presents another impression of this design.



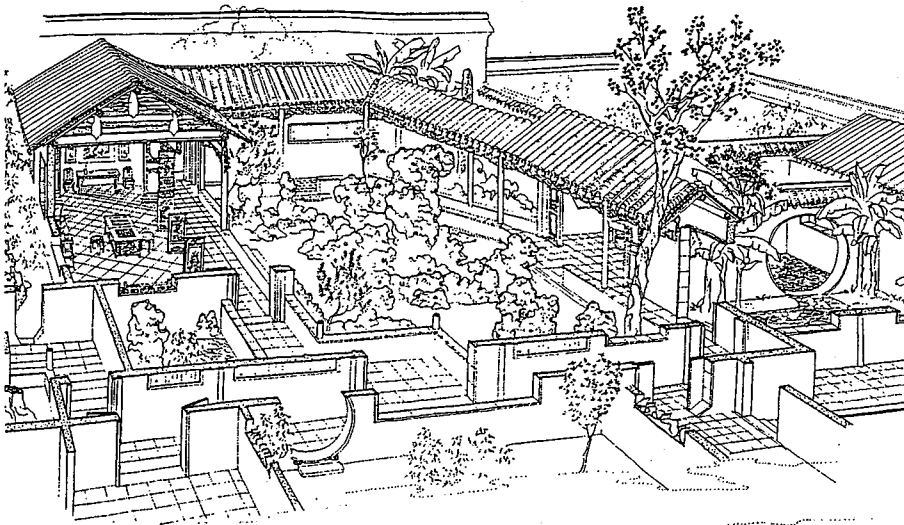
**Fig. 86** An ancient Chinese painting of lotus and rocks, from The Way of the Virtuous-The influence of art and philosophy on Chinese garden design, page: 13.



**Fig. 87** A small courtyard in Linger-Here Garden, from The Art of Chinese Gardens, by Chung Wah Nan, Hong Kong University Press, page: 251.

This courtyard group is composed of three major buildings (“Restored-to-Me Study”, “Salute-to-the-Peak Hall” and “Small House in the Stone Forest”). On a site of about 600 sq. yards, eleven courtyards or small yards are placed with the largest being only 80 sq. yards.(Fig. 30) In order to create spatial variance within a limited site, covered walkways and walls are used to separate and to connect many of the scenic areas. Covered walkways are

inserted from several directions in order to guide routes of observation. These courtyard plans include shapes that are square, rectangular or irregular. Some are too small to enter, while others are large enough for viewers to enter and enjoy the scenery. Each of these three buildings face individual, relatively large courtyards. Scenery may be viewed from inside the buildings or from outside, in the courtyards, depending on differing climatic conditions. Attached to these buildings and covered walkways, several secondary, small yards are included. These smaller areas are introspective and are separated, physically, from the external environment, but they are connected to it visually. Covered walkways either open onto courtyards or they are separated by walls which are ornamented by several openings. Changes between light and shadow, plant colors and rock shapes create a variety of artistic effects. From any location within this courtyard grouping, viewers may enjoy scenery beyond their immediate point of reference. (Fig. 88)



**Fig. 88** Section view in perspective of courtyard of Stone Forest in Linger-Here Garden, from Chinese Classical Gardens of Suzhou, page: 205.

#### 4. 4. SPATIAL VARIANCE

A garden design should provide a special environment in which viewers can enjoy natural beauty through shapes, colors and textures of rocks, water, plants and buildings. Also, a variety of spatial moods can be created by the way in which space is planned within a particular scope of vision.

In the Suzhou private garden, the major way of forming space is by the use of buildings and other interesting scenic devices. When buildings function as the scenic objects, their design must emphasize formal perfection and environmental harmony. However, once they are selected to enclose spaces and to be places from which to view scenery, their focus of design must be centered upon an organic connection between the buildings with respect to people, space and environment.

##### 4. 4. 1. Contrast

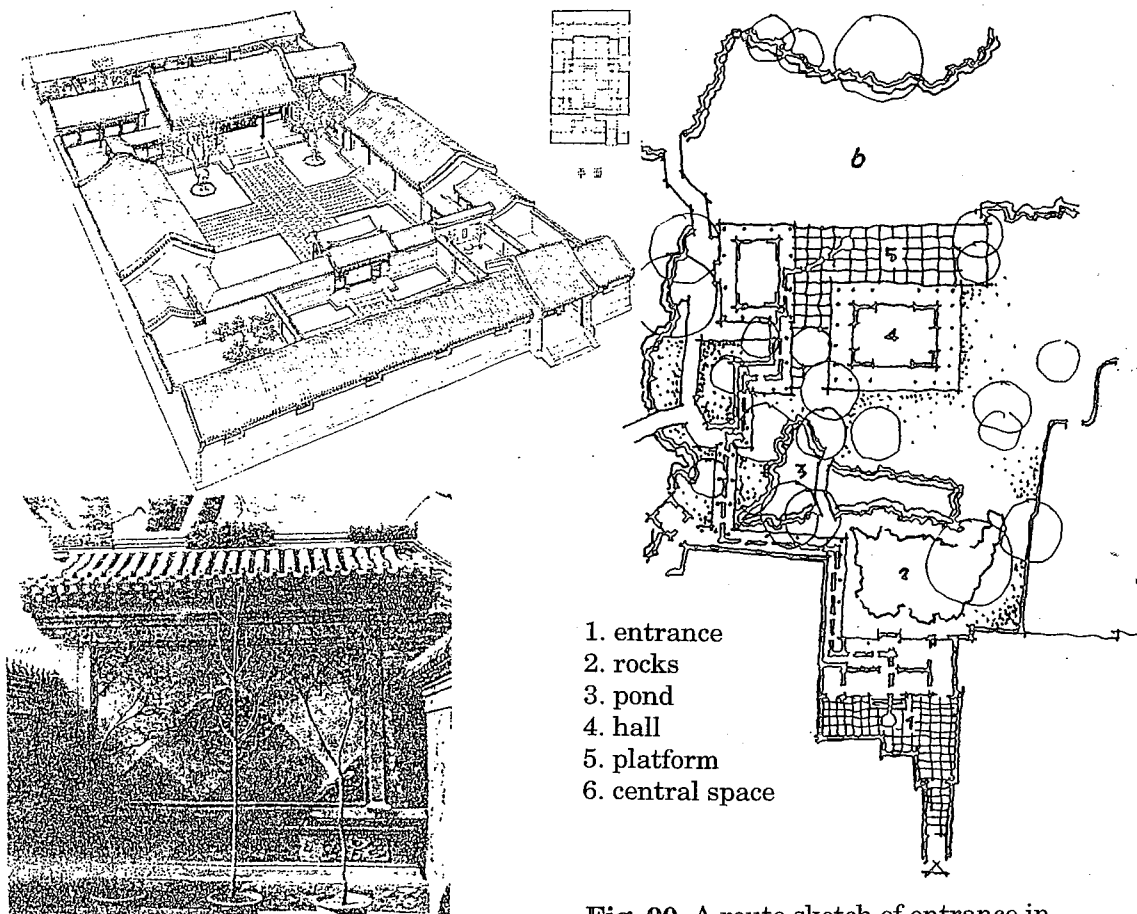
In order to invoke a variety of emotions from scenery, contrast is used frequently in the spatial organization of the Suzhou private garden. Versatile scenic areas, adjacent spaces that are utilized differently, or major and minor spaces within one building group, all can create spatial contrast. These contrasting patterns also include the use of architectural or natural spaces of large and small, closed and open.

Using small space to offset large is one means by which major spaces are highlighted in Suzhou gardens. Smaller spaces could be considered to be low covered walkways, pavilions, small yards or sites surrounded by trees, rocks and walls. These are situated around large, open spaces, in order to provide the greatest sense of depth. Visitors to any type of spatial environment

always seek a situation which is compatible with their own personality. Larger areas provide an agreeable place which can be viewed and enjoyed from static and protected spots. Therefore, smaller spaces, arranged around a larger, topical space, serve as foils to highlight the major space. As a result, smaller spaces become notable in the spatial design of a Suzhou private garden. An example of this treatment may be seen in the central scenic area and surrounding smaller courtyards in Wangshi Yuan (The Retired Fisherman's Garden). (Fig. 33)

Variance in spatial openness and closure can also provide contrast. If this method is used properly, an amazing effect will be achieved. In the Suzhou gardens, a contrast that is used frequently is that of "first closing and then opening" a particular place. In a traditional Chinese residential courtyard, there is often a small entrance space that is separated by a screening wall that faces the entry gate. Entrants must go around it to get to the main courtyard (Fig. 89). This same manner was applied to Zhuozhen Yuan (The Humble Administrator's Gardens). A group of rocks and trees, which serve as a visual barrier, is placed at the main entrance. After by passing this, viewers move forward along winding, covered walkways and meander through several small gardens. When, finally, they enter the main building, Yuanxiang Tang (Distant-Fragrance Hall), the most important scenes can be viewed in their entirety, leaving the observer with a strong feeling of spatial contrast. (Fig. 90) Therefore, these open and closed areas are the basic spatial forms of the Suzhou gardens.

Another prominent feature of a Suzhou garden is the contrasting and connecting of spatial void with solidity. Building interiors are considered to



**Fig. 89** A bird's-eye view of a traditional Chinese residential courtyard and a screen wall at its entrance, from *History of Chinese Classical Architecture*, page: 319.

**Fig. 90** A route sketch of entrance in The Humble Administrator's Garden, by author of this paper.

be solid, while the open spaces that are enclosed by buildings, rocks and trees as a void. Pavilions and open, covered walkways are considered to be semi-solid. When ponds, plants and rocks are placed inside courtyards, then the courtyards give the illusion of greater spaciousness. (Fig. 91) Contrasts between indoor and outdoor devices will then become more obvious. Therefore, Suzhou private gardens are composed rhythmically of spaces of different sizes and shapes that have contrasting features.

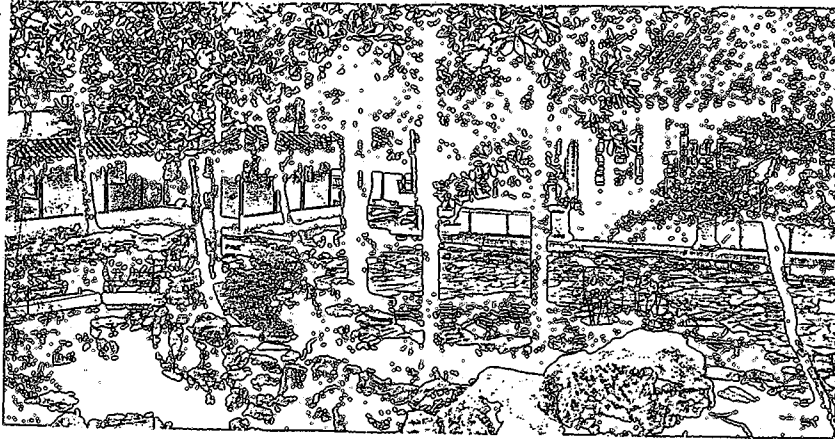


Fig. 91 A entrance courtyard space in The Humble Administrator's Garden, from Chinese Classical Gardens of Suzhou, page: 338.

This difference between uniform and free form space often makes the uniform appear more rigid and the free form seem more lively and interesting. Because of the restrictive constructing manners of classical Chinese architecture and etiquette in a traditional Chinese family, major halls and some residential buildings in the Suzhou private gardens have an orderly arrangement. However, more natural layouts for garden scenery opposes this regularity and has been used effectively at Wangshi Yuan (The Retired Fisherman's Garden). (Fig. 33)

Alternate methods of contrasting have been applied in the Suzhou gardens, depending on differing functional and scenic needs. These dissimilarities have afforded a more natural connection and a less abrupt transition between architectural and natural spaces.



#### 4. 4. 2. Enclosure and Mergence

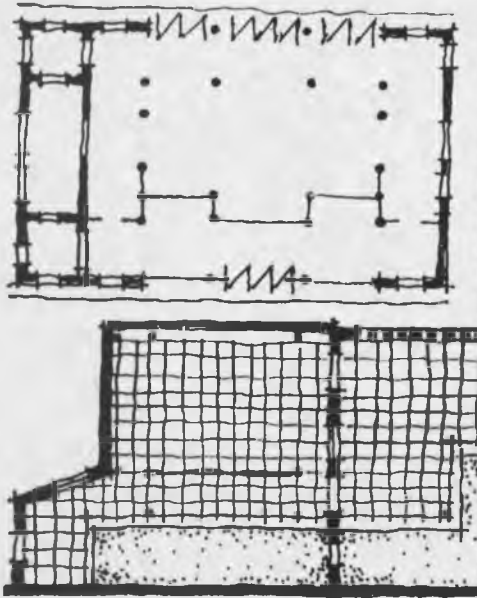
Space is formed by the enclosure and division of concrete substances. Without enclosure, space will not have clear boundaries or shapes. However, it is necessary to penetrate enclosed area, so that they will not be isolated individually and, therefore, unable to be formed into a whole garden. A varied spatial environment, composed of closed, open, isolated, or a combination of these spaces, is required to satisfy human psychological needs. The Suzhou gardens were constructed so that natural scenery could be enjoyed in a residential environments. So, their spatial design focused on the formation, continuance and mergence.

Spatial formation is also related to a garden's artistic concepts. Therefore, varied spatial styles should be aesthetically satisfying. No matter what the relationship among the spaces may be (indoor to indoor, indoor to outdoor, or courtyard to courtyard), they must share a connected, organic continuum.

##### 1). Indoor

In the Suzhou gardens, even though closed and merging effects are shown by the composition of the external spaces, the internal spatial design of a garden building is flexible and connects with external space and scenery.

Traditional Chinese architecture indicates that a common room is a simple cube. In the Suzhou gardens, halls are more functional and have greater spatial requirements than other minor buildings. In order to create interesting interior spaces, screens and partitions are often used to divide them into several changeable, smaller, indoor spaces. (Fig. 92 and 93)



**Fig. 92** Two examples of indoor partitions in Suzhou gardens, by author of this paper.



**Fig. 93** A inside view of a hall in Forest of Lion Garden, from Chinese classical Gardens of Suzhou, page: 286.

## 2). Indoor and outdoor

Three factors that should be considered for the enclosure or the merging between indoor and outdoor spaces are the architectural functions, the scenic features and the orientation of the buildings. [91] Study rooms in private gardens need quiet and secluded surroundings. So, enclosure is the main way of treating this need. These buildings are surrounded by solid walls on their two or three sides, and face a closed, quiet small courtyard (Fig. 74). However, as important viewing locations, halls and waterside pavilions are always designed to be open. These buildings are ornamented by large window frames with open verandahs around two to four facades. This openness allows

[91] Feng, Zhong-ping. Chinese Garden Architecture. Ed. Zhong-ping Feng. 1st ed. Beijing, China: Qinghua University Press, 1988. 177.

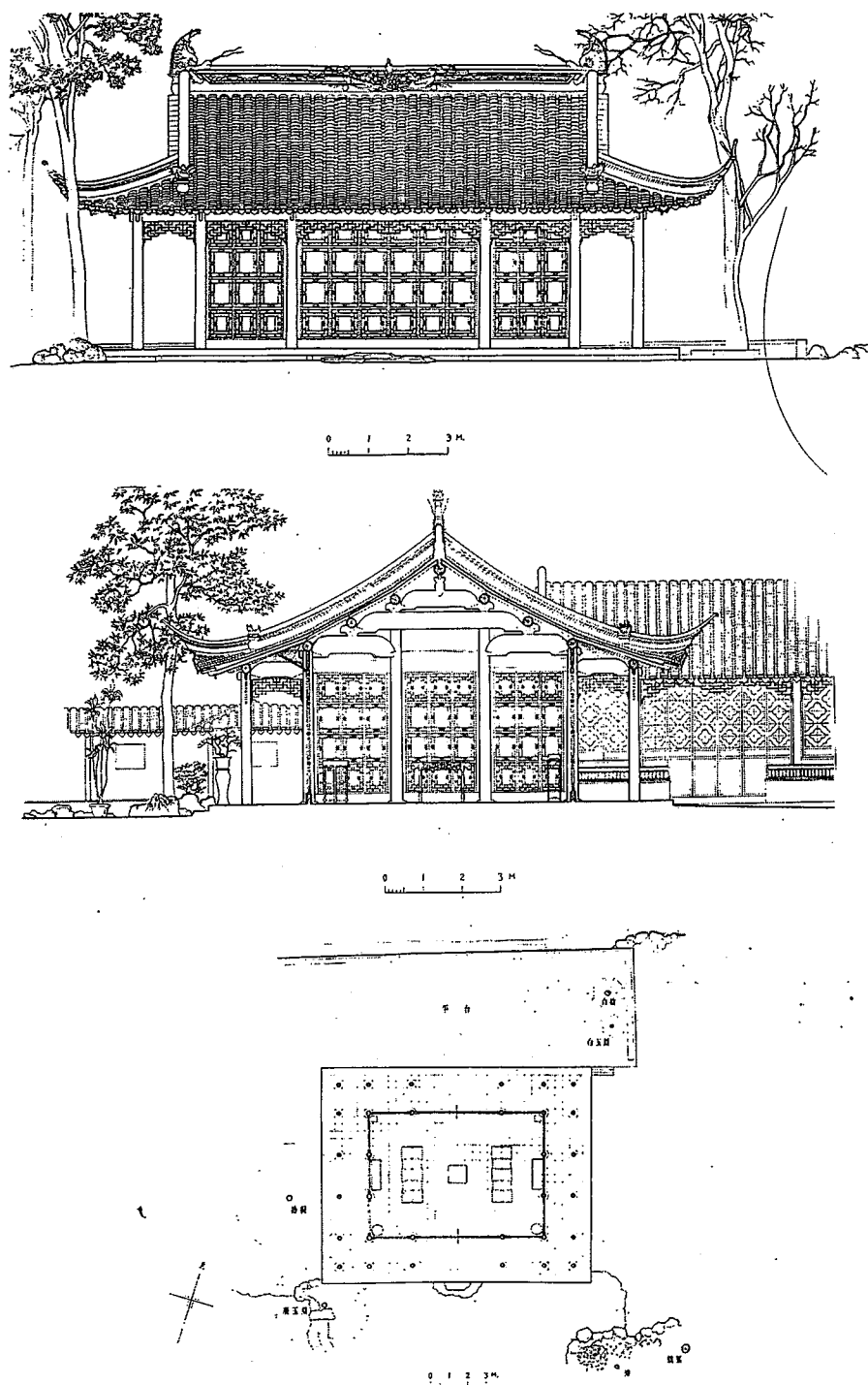
the entrance of sunlight, fresh air and outdoor scenes into the interiors creating even greater spaciousness. (Fig. 58 and 94) In the Suzhou gardens, most buildings open onto preferred locations and scenes, but some building orientations favor pleasing scenery over orientation.

### 3). Outdoor

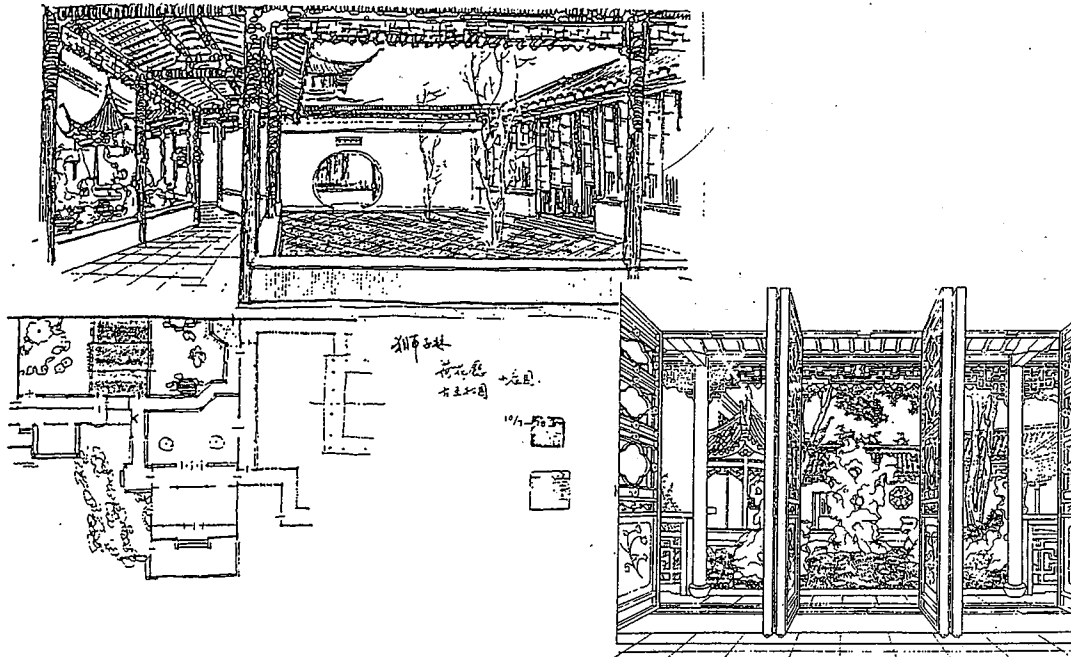
Outdoor spaces in the Suzhou gardens are composed of vertical planes which include buildings, walls, covered walkways, rocks and woods, and of horizontal planes of grounds, water surfaces and grasslands. These areas have different sizes, shapes, elevations, colors, and textures. When viewers remain in one area, the composition of scenes will be altered by the movement of viewing spots which change distances, visual fields and elevations. Abundant scenic objects can create a variety of scenic composition which may provide increased interest and attention. A well-planned outdoor environment will produce continuous spatial rhythm and differing ambiance.

Compared with internal space, the formation of external space is more flexible and abundant in the Suzhou garden. Conditions of location, layout requirement, artistic concept and function have been its foundation. There is no fixed model for creating external space. However, some uniform planning regulation may be found by analyzing existing examples.

a). When there is no enjoyable scenery outside of a group of buildings, or of a quiet internal courtyard, then the "closed outside and opened inside" method is often applied to direct vision and attention to internal environments. Examples are "Restored-to-Me Study" in Liu Yuan (Lingering-Here Garden) (Fig. 74) and "Five-Old-Pine Park" in Shizilin (Forest of Lions Garden). (Fig. 95)



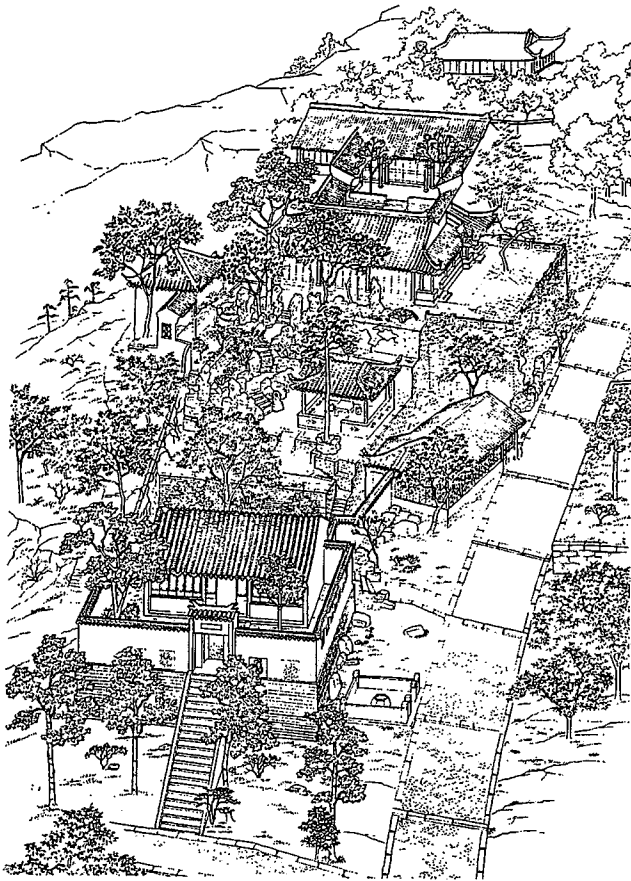
**Fig. 94** The Distant-Fragrance Hall in  
The Humble Administrator's Garden,  
from Chinese Classical Gardens of Suzhou,  
page: 211.



**Fig. 95** The courtyard of “Five-Old-Pine Park” in Forest of Lions Garden, from Chinese Garden Architecture, page: 211.

b). When a group of buildings is surrounded by natural landscaping, the “openness” is the major way of spatial treatment, so that the external scenery may be enjoyed. In this case, the internal courtyard is given less attention. Emphasis of spatial design focuses on the connection of internal and external environments. (Fig. 96) Because most of the Suzhou gardens are located in urban areas, this is a rare occurrence in them.

c). When several courtyards are joined, the spatial boundaries between them must be clear, so that their individual scenes may be enjoyed separately. So, spatial exchange is necessary. In this situation, spatial enclosure and spatial mergence should be used together. In the Suzhou gardens, many examples can be found. In Zhuozhen Yuan (The Humble



**Fig. 96** A bird's-eye view of Mountain Villa of Embracing Emerald, from Chinese Classical Gardens of Suzhou, page: 433.

Administrator's Garden), there are three adjacent courtyards (Fig. 76), "Exquisite House" (No. 1), "Spring-Begonias-Cove House" (No. 2) and "Listening-to-the Rain Hall" (No. 3), which are separated from each other by ornamental walls, but are also connected by winding, covered walkways. These three courtyards have different sizes, shapes and features, but their ambiance is engineered by a common design of close distance enjoyment. A quiet courtyard group is formed using the spatial division and a combination of enclosure and mergence. Walls, rocks and trees are placed between internal and external spaces. This arrangement is so flexible that both

internal and external scenes may be appreciated, and this building group will connect its surroundings naturally.

Many devices for the closing and merging of external spaces can be implemented, including both architectural and natural elements. For example, a high, solid wall makes a tight enclosure; a wall, lower than normal visual points, causes feelings that differ from those produced by a high wall; an ornamental wall, with openings of different shapes and sizes, inspires to imagine an effect of openness. Covered walkways not only separate spaces, but they provide also a special place for activities. An open covered walkway is used for spatial openness. When spatial separation is necessary, a single-opened, covered walkway which is open on one side but has a wall on another side, will be used with its open side facing internal areas. When outside scenery is pleasant, several openings will be used within the walls of a single-opened, covered walkway; when there are enjoyable scenes in both external and internal spaces, which need to be enjoyed but also separated, the double, covered walkway is ideal (Fig. 63). Separating outdoor spaces with buildings and walls is a common practice in the Suzhou garden. Different surroundings and artistic concepts indicate various methods by which to organize space.

#### 4. 4. 3. Series

Space is a three dimensional, visual environment having depth, height and width. However, when the factor of time is considered, a four dimensional, space and time, environment must be more changing. A

repetitive, visual environment can produce mental lethargy. Ideally, the organization of a garden space should meet human psychological needs. For this reason, the design of a spatial series is an important step in the layout of the Suzhou gardens.

When several spaces having heterogeneous shapes and features are intentionally situated along a particular route, a spatial series will be formed. Spaces within this series can vary and contrast depending upon their size, orientation, lightness, closures or openness, thus a spatial cluster is created (Fig. 97). Scenes may vary in response to the passage of time or according to

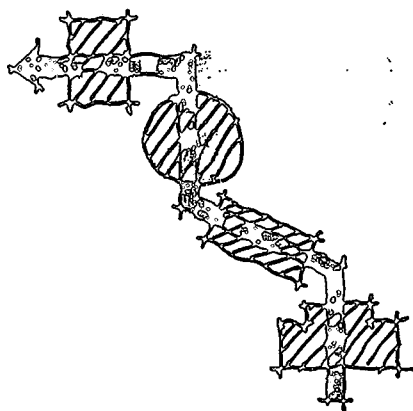


Fig. 97 A sketch of spatial series,  
by author of this paper.

the position from which they are viewed. A route that is aesthetically pleasing can guide viewers from one space to another. Along with the process of enjoying scenery, viewers tend to retain memories of a previous space, while anticipating the coming of the next. A total visual impression will be formed by the amalgamation of partial impressions. In the Suzhou gardens, this method is often used where there is building density.

Classical Chinese architecture has difficulty containing a series of spaces within a single building, so several individual buildings are arranged in order to compose interchangeable, indoor and outdoor spaces. So the spatial series

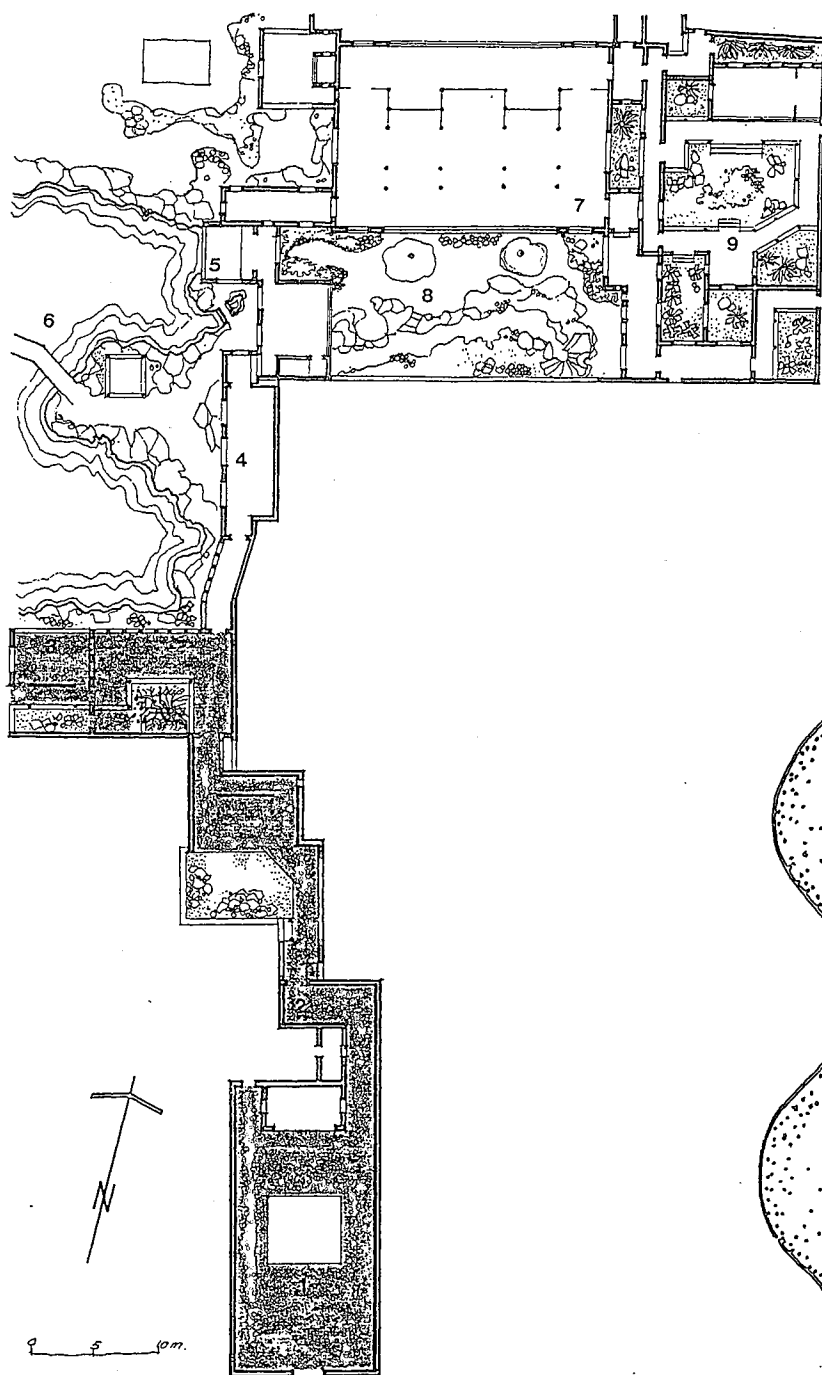


becomes a cluster of indoor and outdoor spaces usually having asymmetrical and irregular shapes. Its main characteristic is that of a winding, circular axis that rotates continuously in a small area. An example of this which leaves an unique impressions upon the viewers can be seen in Liu Yuan (Lingering-Here Garden). (Fig. 98)

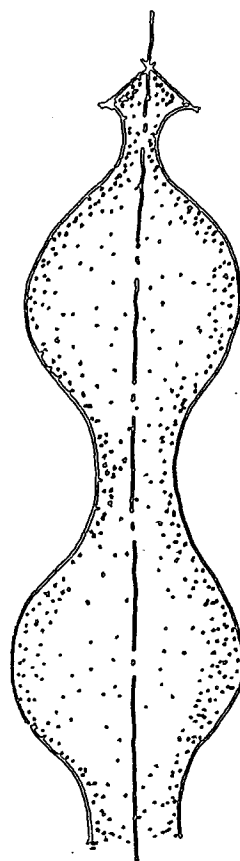
At the main entrance of this garden, an indoor and outdoor spatial series is formed by the alternate placing of a group of buildings. A 160 feet route, from the garden gate to the central area, is positioned in a narrow passageway between two high walls. This can be disadvantageous for an entrance, but here, the designers have created a pleasing effect. This passageway was considered as part of a spatial chain composed of several small yards and covered walkways. They serve to predict a culmination of this spatial series. "The first group of buildings is entered from the street, presenting a series of spaces which act as a preamble to be negotiated before the garden proper. In these, the problem of covering a distance.....is resolved in such a way that it is a stimulating experience and not merely a transitory passage."<sup>[92]</sup> Within this spatial chain, the design skill of "expanding - contracting - expanding" was applied as a means of contrast. (Fig. 99) Three small yards are placed at each end with one in the center of this route, which contrast with the narrow passageway because of variations in size, shapes, lightness and scenery. Not only can these small yards get direct natural light, but they include pleasing scenic objects. So, the organization of motion is a

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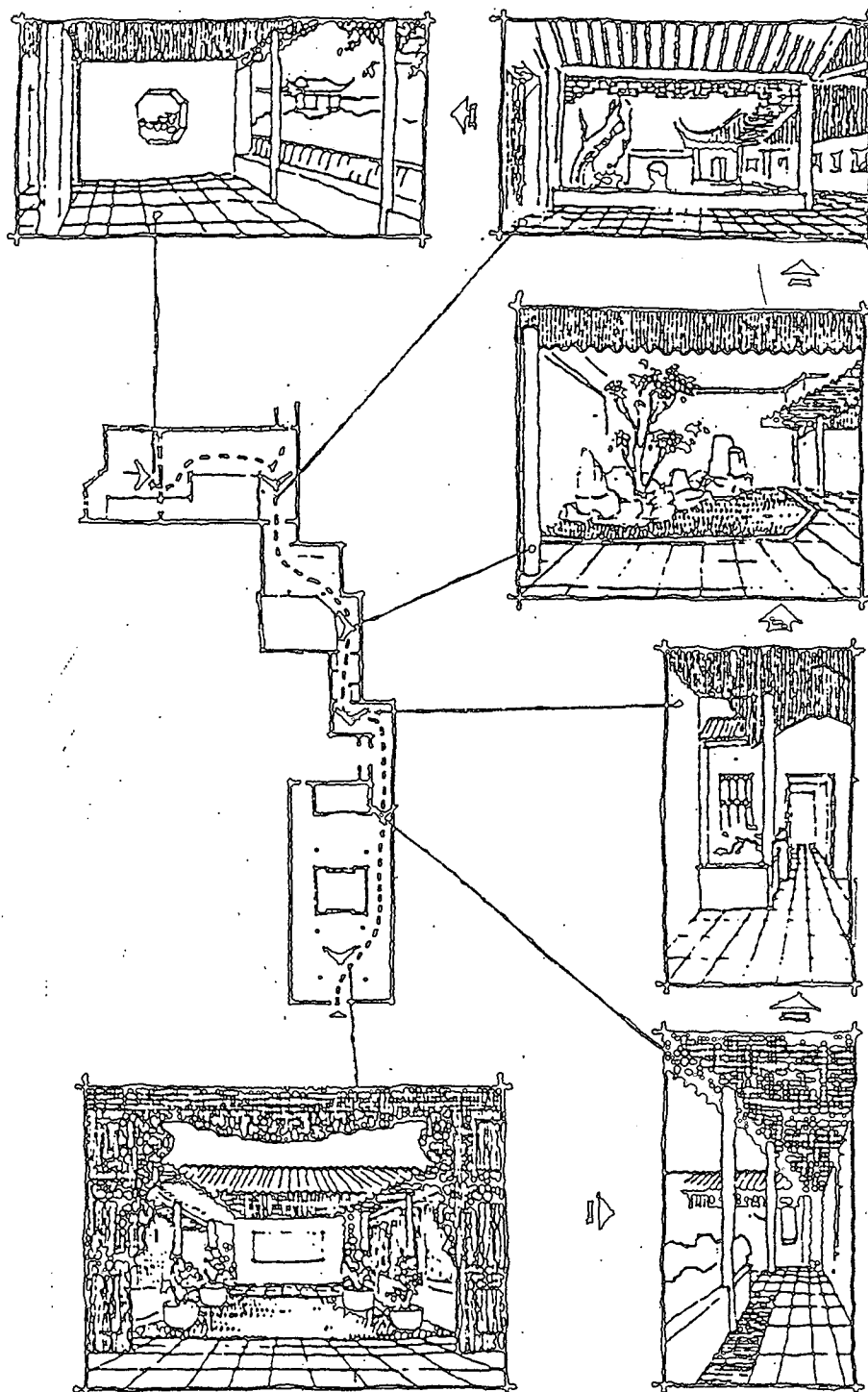
[92] Johnston, R. Stewart. Scholar Gardens of China - A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 128.



**Fig. 98** A detailed entrance plan in Lingering-Here Garden, from Scholar Gardens of China-A study and analysis of the Chinese private garden, page: 129.



**Fig. 99** A sketch of “expanding-contracting-expanding”, by author of this paper.



**Fig. 100** A spatial series along the entrance route in Lingering-Here Garden, from Chinese Classical Gardens of Suzhou, page: 182.

pattern of “staying - moving - staying” (Fig. 100). Winding, covered walkways, a variety of ornamental openings and differing courtyard formations have dissipated feelings of closeness in the narrow passageway. When visitors conclude their walk along this interesting passageway, a spacious, central area will be immediately seen. Such spatial contrast creates a strong impression (Fig. 101). This produces an infinite spatial effect within a limited site.



**Fig. 101** An open view at the end of spatial series in the entrance of Linger-Here Garden, from Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden, page: 12.

The unique environment results in the employment of special concepts and skills of spatial design in the Suzhou gardens. Based on different functions and sizes, various buildings are selected to form distinctive courtyards. Between courtyards, or courtyard and building, some design skills are used to enhance visual feelings, or to create impressive spatial effects. When in an ideal site, it is essential to use surroundings for garden design. However, most of the Suzhou private gardens do not have this opportunity. Therefore,

their spatial and visual designs became the prominent concerns, throughout the historic development, and a variety of unique design concepts and devices of Suzhou garden could be produced.

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APPLICATION



## CHAPTER FIVE

### CONCLUSION

#### 5. 1. THE SUZHOU GARDENS: AN OVERVIEW

By studying the primary design principles of the Suzhou private gardens, it can be found that the functional, artistic and environmental features of these gardens are the physical expression of the aesthetic and philosophical ideals of the Chinese ancient scholars and officials.<sup>[93]</sup> These valuable features are reflected by three main components.

As an important part of an integral habitat, Suzhou gardens offer necessary and comfortable residential conditions. Provision is made for a variety of family activities, with its members housed in appropriate and attractive buildings and courtyards.

As areas of scenic enjoyment, Suzhou gardens create natural, but artistic, environments for their occupants. These habitats are the atmospheres in which the designers and residents have expressed their private emotions and artistic ideologies.

Suzhou gardens also provide improved living conditions within a small, contained environment. Bodies of water and plants not only purify air and adjust temperatures, they help to form pleasing scenic views within congested urban surroundings.

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[93] Johnston, R. Stewart. Scholar Gardens of China-A study and analysis of the spatial design of the Chinese private garden. 1st ed. Cambridge, New York, Port Chester, Melbourne, Sydney: Cambridge University Press, 1991. 315.

These special characteristics have resulted in large amounts of research. Also, their unique qualities provided the inspiration that facilitated the writing of this paper.

When considering the Chinese urban environment of the present, it is important and necessary to conduct a thorough survey and evaluation of the Suzhou gardens. This would include an investigation of their functional and aesthetic values. A comprehensive study of the Suzhou gardens will provide a definitive basis for further research. The resulting information will be invaluable when combining the design principles and ideologies of Suzhou gardens with contemporary Chinese urban designs. The goal of this paper is to study the historic and cultural background of the classical Suzhou private garden. By understanding its practical aspects, some valuable knowledge will be presented and may be applied to the improvement of the current Chinese urban residential environment. In order to reach this goal, three main categories were discussed in this paper.

First, there was a general review of the historic development of Chinese gardens. Throughout long periods of time, Chinese gardens evolved, having been influenced by social, economic and cultural transformations. Several garden styles were formed from their distinctive characteristics. The resulting prototypes were the imperial gardens, private gardens, temple gardens and large landscaped areas. Within these styles are found significant and valuable similarities.

Second, an analysis of site planning and scenic and spatial design in the Suzhou gardens was investigated. After extensive practice, several design principles found in the Suzhou gardens were formalized and adopted, thus



creating distinctive urban private gardens within a variety of site conditions. The utilization of these design skills has produced pleasant and interesting scenic effects, even within unfavorable surroundings.

Finally, there was an exploration of the impact that traditional Chinese culture has had on garden design, including distinctive form and style, as well as special inherent qualities. This is reflected in much of the best of Chinese classical architecture and gardens. These outstanding examples are derived from Chinese tradition and culture, and represent unique national styles.

## 5. 2. RESEARCH DEVELOPMENT

An evaluation of the Suzhou gardens is significant in order to understand and apply their principles to the contemporary environment.

Although much valuable information has been learned from the study of Suzhou private gardens, application of these principles has limitations in a contemporary environment.

Because of environmental and structural restrictions, a Suzhou garden cannot occupy large areas in an urban center. Also, most of its courtyards are enclosed by, and composed of, small buildings. As a result, these courtyards must be built on a small scale while the basic design principle of the garden is intended to create a sense of infinite space within a small and enclosed site.

Historically, a Suzhou private garden was owned by one family who were either wealthy scholars, officials or merchants. Principles of design, from which special site plans, spatial forms, and architectural and ornamental styles were derived, were focused on building pleasant living surroundings for

an extended family. Current utilization of these gardens in China indicates that crowded living conditions are completely unsuitable for the quiet and secluded atmosphere of a Suzhou garden.

Finally, the private gardens of Suzhou city are situated in the "water county" of China. Therefore, planning of scenic areas, inclusion of water bodies, selection of plants, and design of architectural styles are related fundamentally to this unique environment. Appropriate regional, topographical and climatic conditions must be the prerequisite for creating a private garden, as seen in Suzhou.

When architects and planners attempt to apply the design principles of the Suzhou private gardens to a contemporary environment, problems may occur and new questions may arise. For instance, there is a concern that this ancient method of design may not be accepted by the present society in China. Styles that were employed in the Suzhou gardens may not prove to be adequate to meet the requirements of today's living conditions. Effective application of these design principles may not be appropriate when creating a modern Chinese architectural style. A comprehensive study of these issues is vital.

This paper has presented a broad and fundamental description of the Suzhou private gardens. Further research to develop and apply these methods of design to a contemporary environment would be an extension of this paper. The achievement of this goal might be critical to the improvement of residential living in a Chinese urban environment.

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